Carborundum Universal Limited
Regd.off : 'Parry House', 43, Moore Street,
Chennai - 600 001, India.
Tel.: +91-44-3000 6161 Fax : +91-44-3000 6149
Email : cumigeneral@cumi.murugappa.com
Website : www.cumi.murugappa.com
CIN No. : L29224TN1954PLC000318.

5th July 2019

BSE Limited
1st Floor, New Trading Ring
Rotunda Building, P J Towers
Dalal Street, Fort
Mumbai 400 001

Stock Code: 513375

The Manager
Listing Department
National Stock Exchange of India Ltd.
Exchange Plaza, 5th Floor
Plot No. C/1, G Block
Bandra-Kurla Complex, Bandra (E)
Mumbai 400 051

Stock Code: CARBORUNIV-EQ

Dear Sirs,

Sub: Annual Report for the financial year ended 31st March 2019

We enclose a copy of the Annual Report of our Company comprising the financial statements, Directors report and Auditors report thereon for the financial year ended 31st March 2019 and the Notice convening the 65th Annual General Meeting of the Company, copies of which is being despatched to the shareholders of the Company.

Thanking you,

Yours faithfully
For Carborundum Universal Limited

Rekha Surendhiran
Company Secretary

Encl.: a.a.

murugappa

CARBORUNDUM UNIVERSAL LIMITED

CIN:L29224TN1954PLC000318
Registered Office: Parry House, 43 Moore Street, Chennai - 600001, India
Tel: +91-44-30006161; Fax: +91-44-30006149;
E-mail: investorservices@cumi.murugappa.com; Website: www.cumi-murugappa.com

NOTICE TO MEMBERS

NOTICE is hereby given that the Sixty Fifth Annual General Meeting (AGM) of the Members of the Company will be held at 3.00 p.m. IST on Wednesday, 31st July 2019 at TTK Auditorium (Main Hall), The Music Academy, New No. 168, TTK Road, Royapettah, Chennai - 600 014 to transact the following business:

ORDINARY BUSINESS

Item No.1 - Adoption of Standalone Financial Statements

To consider and if deemed fit, to pass the following as an Ordinary Resolution:

RESOLVED THAT the Audited Standalone Financial Statements for the year ended 31st March 2019 and the Reports of the Board and Independent Auditors thereon be and are hereby considered, approved and adopted.

Item No.2 - Adoption of Consolidated Financial Statements

To consider and if deemed fit, to pass the following as an Ordinary Resolution:

RESOLVED THAT the Audited Consolidated Financial Statements for the year ended 31st March 2019 and the Independent Auditors' Report thereon be and are hereby considered, approved and adopted.

Item No.3 - Declaration of Dividend

To consider and if deemed fit, to pass the following as an Ordinary Resolution:

RESOLVED THAT a final dividend of ₹1.25/- per equity share of ₹1/- each be declared for the financial year ended 31st March 2019 and that the same be paid out of the profits of the Company to those shareholders whose names appear in the Register of Members as on 31st July 2019 in case the shares are held in physical form and to the beneficial holders of the dematerialised shares as on 31st July 2019 as per the details provided by National Securities Depository Limited and Central Depository Services (India) Limited in case the shares are held in electronic form.

RESOLVED FURTHER THAT the interim dividend of ₹1.50/- per equity share of ₹1/- each declared by the Board of Directors and paid for the financial year ended 31st March 2019 be and is hereby confirmed.

Item No.4 - Re-appointment of Mr. M M Murugappan, Director

To consider and if deemed fit, to pass the following as an Ordinary Resolution:

RESOLVED THAT Mr. M M Murugappan holding DIN 00170478, who retires by rotation and being eligible has offered himself for re-appointment, be and is hereby re-appointed as a Director of the Company liable to retire by rotation.

SPECIAL BUSINESS

Item No.5 - Re-appointment of Mr. Aroon Raman as an Independent Director

To consider and if deemed fit, to pass the following as a Special Resolution:

RESOLVED THAT pursuant to the provisions of Sections 149, 150, 152 read with Schedule IV and other applicable provisions of the Companies Act, 2013 and the Companies (Appointment and Qualifications of Directors) Rules, 2014 and Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 [including any statutory modification(s) or amendment(s) thereto or re-enactment(s) thereof for the time being in force], Mr. Aroon Raman holding DIN 00201205, who was appointed as an Independent Director of the Company at the 60th Annual General Meeting and who holds office upto close of business hours on 31st July 2019 and who being eligible for re-appointment as an Independent Director has offered himself for re-appointment and in respect of whom the Company has received a Notice in writing from a Member under section 160 of the Companies Act, 2013 proposing his candidature for the office of Director, be and is hereby re-appointed as an Independent Director of the Company, not liable to retire by rotation, to hold office for a second term of five (5) consecutive years from 1st August 2019.

Item No.6 - Re-appointment of Mr. Sanjay Jayavarthanavelu as an Independent Director

To consider and if deemed fit, to pass the following as a Special Resolution:

RESOLVED THAT pursuant to the provisions of Sections 149, 150, 152 read with Schedule IV and other applicable provisions of the Companies Act, 2013 and the Companies (Appointment and Qualifications of Directors) Rules, 2014 and Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 [including any statutory modification(s) or amendment(s) thereto or re-enactment(s) thereof for the time being in force], Mr. Sanjay Jayavarthanavelu holding DIN 00004505, who was appointed as an Independent Director of the Company at the 60th Annual General Meeting and who holds office up to close of business hours on 31st July 2019 and who being eligible for re-appointment as an Independent Director has offered himself for re-appointment and in respect of whom the Company has received a Notice in writing from a Member under section 160 of the Companies Act, 2013 proposing his candidature for the office of Director, be re-appointed as an Independent Director of the Company, not liable to retire by rotation, to hold office for a second term of five (5) consecutive years from 1st August 2019.

Item No.7 - Appointment of Mr. N Ananthaseshan as Managing Director

To consider and if deemed fit, to pass the following as an Ordinary Resolution:

RESOLVED THAT pursuant to the provisions of Sections 152, 161 and other applicable provisions of the Companies Act, 2013 and the Rules made thereunder [including any statutory modification(s) or amendment(s) thereto or re-enactment(s) thereof for the time being in force], Mr. N Ananthaseshan holding DIN 02402921 who was appointed as an Additional Director on 26th April 2019 by the Board pursuant to Section 161(1) of the Act to hold office upto the date of this AGM and in respect of whom the Company has received a notice in writing from a Member under Section 160 of the Act proposing his candidature for office of Director, be and is hereby appointed as Director of the Company.

RESOLVED FURTHER THAT pursuant to the provisions of Sections 196, 197, 203, Schedule V and other applicable provisions of the Companies Act, 2013 and the Rules made thereunder [including any statutory modification(s) or amendment(s) thereto or re-enactment(s) thereof for the time being in force], the appointment of Mr. N Ananthaseshan holding DIN 02402921 as the Managing Director (Designate) of the Company for a term commencing from 26th April 2019 to 22nd November 2019 and as the Managing Director of the Company for a term commencing from 23rd November 2019 till 22nd November 2022 be and is hereby considered and approved on the following terms:

(i) Salary

₹5,02,800/- per month. The Nomination and Remuneration Committee, may decide the increments in salary, from time to time, subject to a maximum of ₹8,50,000 per month.

(ii) Allowances/Perquisites/Commission/Incentive

In addition to salary, Mr. N Ananthaseshan will be entitled to:

- allowances like leave travel allowance, personal allowance, special allowance, grade allowance and/or any other allowance;
- perquisites such as furnished/unfurnished accommodation to be provided by the Company or house rent allowance in lieu thereof, reimbursement of medical expenses incurred for self and family, club fees, provision of car(s) and any other perquisites, benefits, amenities;
- commission/incentive;
- ESOPs in accordance with the Company's ESOPs Scheme as may be approved by the Nomination and Remuneration Committee from time to time subject to:
  - The allowances and perquisites not exceeding 100% of the salary and;
  - Incentive/commission (at 100% levels being not exceeding 25% of Annual pay. (Annual pay includes salary, perquisites, allowances, incentive and retirement benefits).

(iii) Retirement benefits

- Contribution to Provident Fund, Superannuation Fund, National Pension Scheme, Gratuity as per rules of the Fund/ Scheme in force from time to time.
- Encashment of leave as per rules of the Company in force from time to time.

(iv) General

- In the event of absence or inadequacy of profits in any financial year, Mr. N Ananthaseshan, shall be entitled to such remuneration as may be determined by the Board, which shall not, except with the approval of the shareholders exceed the limits prescribed under the Companies Act, 2013 and rules made thereunder or any statutory modification or re-enactment thereof.
- Perquisites shall be valued in terms of Income Tax rules or actual expenditure incurred by the Company in providing the benefit or generally accepted practice as is relevant. Provision of telephone (including at residence) shall not be reckoned as a perquisite.
- The aggregate remuneration (including salary, allowances, perquisites, incentive/commission and retirement benefits) for any financial year shall be subject to an overall ceiling of five per cent of the net profits of the Company for that financial year computed in the manner prescribed under the Companies Act, 2013.

- Mr. N Ananthaseshan will not be entitled to any sitting fees for attending meetings of the Board or of any Committee thereof.

Mr. N Ananthaseshan will be subject to all other service conditions as applicable to any other employee of the Company.

Item No.8 - Approval for payment of commission to Mr. M M Murugappan

To consider and if deemed fit, to pass the following as a Special Resolution:

RESOLVED THAT pursuant to the provisions of Regulation 17(6)(ca) of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 [including any statutory modification(s) or amendment(s) thereto or re-enactment(s) thereof for the time being in force] and Article 17.16 of the Articles of Association of the Company, approval be and is hereby granted for remuneration payable to Mr. M M Murugappan, Chairman including by way of commission payable for the FY 2018-19 aggregating to a sum not exceeding ₹10 million excluding the sitting fees payable in respect of the meetings of the Board/Committees in which he would be participating during the course of the financial year 2019-20 considering that the remuneration payable to him is likely to exceed fifty per cent of the total annual remuneration payable to all Non-Executive Directors during FY 2019-20.

RESOLVED FURTHER THAT the Board of Directors be and is hereby authorised to take all such steps as may be necessary, desirable or expedient to give effect to this Resolution.

Item No.9 - Ratification of Cost Auditor's Remuneration

To consider and if deemed fit, to pass the following as an Ordinary Resolution:

RESOLVED THAT pursuant to the provisions of Section 148(3) and other applicable provisions of the Companies Act, 2013 read with the Companies (Audit and Auditors) Rules, 2014 [including any statutory modification(s) or amendment(s) thereto or re-enactment(s) thereof for the time being in force], the remuneration of ₹4,50,000 payable to M/s. S Mahadevan & Co. (Firm registration no.000007) Cost Accountants, Chennai, appointed by the Board of Directors to conduct the audit of the cost accounting records of the Company for the financial year 2019-20, excluding applicable taxes and out of pocket expenses incurred by them in connection with the Cost Audit be and is hereby ratified and confirmed.

By Order of the Board

Chennai, **Rekha Surendhiran**
April 26, 2019 *Company Secretary*

Notes:

1. **A Member entitled to attend and vote at the AGM is entitled to appoint a proxy/proxies to attend and vote instead of himself/herself and the proxy need not be a Member. The proxy form in order to be effective should be deposited at the Registered Office of the Company, duly completed and signed, not less than 48 hours before the commencement of the Meeting. Proxies submitted on behalf of limited companies, societies, etc., must be supported by appropriate Resolutions/Authorisation, as applicable. A person can act as proxy on behalf of Members not exceeding fifty (50) and holding in aggregate not more than 10% of the total share capital of the Company. In case a proxy is proposed to be appointed by a Member holding more than 10% of the total share capital of the Company carrying voting rights, then such proxy shall not act as a proxy for any other person or Member. The proxy form for the AGM is enclosed.**

   During the period beginning twenty four (24) hours before the time fixed for the commencement of the Meeting and ending with the conclusion of the Meeting, a Member is entitled to inspect the proxies lodged at any time during the business hours of the Company, provided not less than three (3) days advance notice in writing is given to the Company. Members/ Proxies are requested to bring their duly filled in attendance slips enclosed herewith to attend the Meeting mentioning therein the details of their DP and Client ID/Folio number. The route map showing directions to the venue of the AGM is annexed.

2. Corporate Members intending to send their authorized representatives to attend the Meeting are requested to send to the Company a certified copy of the Board resolution authorising their representative to attend and vote on their behalf at the Meeting.
3. The statement of material facts pursuant to Section 102 of the Companies Act, 2013 in respect of the businesses under item nos. 4 to 9 of the Notice to be transacted at the AGM is annexed hereto.
4. The Register of Members and Share Transfer Books of the Company will remain closed from Wednesday, 24th July 2019 to Wednesday, 31st July 2019 (both days inclusive) for the purpose of payment of final dividend for the financial year ended 31st March 2019. Subject to the provisions of the Act, the final dividend as recommended by the Board, if declared will be paid by 8th August 2019.
5. As per the provisions of the Companies Act, 2013, facility for making nomination is available to individuals holding shares in the Company. The prescribed nomination form can be obtained from the Registrar and Share Transfer Agent (RTA)/ Depository Participant (DP).

6. Dividends remaining unclaimed/unpaid for a period of seven (7) years shall be transferred to the Investor Education Protection Fund. The Company has transferred unclaimed/ unencashed dividends up to the Interim Dividend for FY 2011-12 to the Investor Education Protection Fund during the year ended 31st March 2019.

   The Company has uploaded the details of unpaid and unclaimed amounts lying with it as on 3rd August 2018 (date of last AGM) on the website *www.cumi-murugappa.com* as also on the website of the Ministry of Corporate Affairs. Members can ascertain the status of their unclaimed dividend amounts from these websites.

   Members who have not encashed their warrants in respect of the final dividend declared for financial year 2011-12 and subsequent dividends thereon may write to the Company Secretary or RTA immediately for claiming their dividends.

   Pursuant to the notification of Section 124(6) of the Companies Act, 2013 and Investor Education and Authority (Accounting, Audit, Transfer and Refund) Rules, 2016, the Company is also required to transfer the shares in respect of which dividend has not been paid or claimed for seven consecutive years or more. During the year, the Company transferred 75,778 equity shares pertaining to 57 holders to the Investor Education and Protection Fund Authority. The Company had issued the requisite notice to the shareholders concerned intimating them of the impending transfer of shares and had simultaneously published a notice in leading dailies. Further, the Company has uploaded the details of the same on its website for the information of its shareholders. As at 31st March 2019, 591,673 shares pertaining to 483 holders have been transferred to the Investor Education and Protection Fund Authority.

   Shareholders are entitled to claim the shares from the Investor Education and Protection Fund Authority by making an application online along with the requisite documents in Form IEPF-5 available on the website *http://www.iepf.gov.in/IEPFA/refund.html*. Shareholders are requested to contact the Company's RTA - M/s. Karvy Fintech Private Limited or the Company in this regard.

   By virtue of an Order passed by the Hyderabad Bench of the National Company Law Tribunal (NCLT Order) approving the composite scheme of arrangement and amalgamation between M/s. Karvy Consultants Limited (demerged company), M/s. Karvy Computershare Private Limited (Transferor company) and M/s. Karvy Fintech Private Limited (resulting company), the operations of Karvy Computershare Private Limited have been transferred to M/s. Karvy Fintech Private Limited with effect from 17th November 2018. Karvy Fintech Private Limited, Hyderabad, is the Company's Registrar and Share Transfer Agent (RTA). The contact details are available in the General Shareholder Information section of the Report.

7. The Securities and Exchange Board of India (SEBI) has mandated the submission of Permanent Account Number (PAN) by every Participant in securities market for registering transfers, transpositions, transmissions etc. Members holding shares in electronic form are therefore requested to submit the PAN to their Depository Participant with whom they maintain their demat accounts. Members holding shares in physical form are requested to submit a copy of their PAN card and original cancelled cheque leaf/attested bank passbook showing name of the account holder and bank account details to the RTA/Company to ensure timely credit of dividends.

   Members are requested to note that in terms of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (amended from time to time), with effect from 1st April 2019, shares of the Company can be transferred only in dematerialised form. In view of the above, Members are advised to dematerialise the shares held by them in physical form.

8. Additional information pursuant to SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and Secretarial Standards on General Meetings in respect of the Directors seeking appointment/re-appointment at the AGM is furnished and forms part of the Notice. The Directors have furnished the requisite consents/declarations for their appointment/re-appointment.

9. Electronic copy of the Annual Report is being sent to all the Members holding shares in dematerialised mode and whose e-mail IDs are available with the Depository Participant(s) and to all the Members holding shares in physical mode whose e-mail IDs are registered with the Company/RTA for communication purposes unless any Member has requested for a hard copy of the same. For Members who have not registered their e-mail address, physical copies of the Annual Report for FY 2018-19 is being sent through the permitted mode.

10. The business set out in the Notice will be transacted through electronic voting system. Pursuant to Section 108 of the Companies Act, 2013 read with Rule 20 of the Companies (Management and Administration) Rules, 2014, and amendments thereof, the Company is pleased to offer e-voting facility to the Members to cast their votes electronically on all resolutions set forth in the Notice convening the 65th AGM. The Company has engaged the services of M/s. Karvy Fintech Private Limited to provide remote e-voting facility to enable Members to exercise their votes in a secured manner. The instructions for remote e-voting is provided at the end of this section.

The Board of Directors have appointed Mr. R Sridharan or failing him Ms. Srinidhi Sridharan of M/s. R Sridharan and Associates, Practising Company Secretaries as the Scrutiniser to scrutinise the e-voting process in a fair and transparent manner.

The Notice and the instructions for e-voting along with Attendance Slip and Proxy Form is being sent in electronic form to all the Members whose e-mail IDs are registered with the Company/their DPs for communication purposes unless any Member has requested for a hard copy of the same.

For Members who have not registered their e-mail address, physical copies of the aforesaid documents is being sent in the permitted mode. Members may also note that the Notice of the 65th AGM and the Annual Report 2018-19 will also be available on the Company's website www.cumi-murugappa.com. Even after registering for e-communication, Members are entitled to receive the communication in physical form, upon making a request for the same. Members may please send in their requests to the Company's investor e-mail ID: investorservices@cumi.murugappa.com.

11. Members are requested to send their queries, if any, on the accounts or operations of the Company in advance to the Registered Office of the Company addressed to the Company Secretary or by e-mail to investorservices@cumi.murugappa.com to enable us to keep the information ready.

12. Members holding shares in physical form are requested to avail dematerialisation facility to eliminate all risks associated with holding in physical form and for ease in portfolio management. For further information, please contact us at investorservices@cumi.murugappa.com or contact the RTA.

13. A shareholder satisfaction survey form is available on the website of the Company at *http://www.cumi-murugappa.com/survey/index.php.* Members who have not yet participated in the survey are requested to kindly give your valuable feedback by filling up the form in the above link.

14. Members who hold shares in physical form in multiple folios in identical names or joint holding in the same order of names are requested to send their share certificates to the RTA for consolidation into a single folio.

15. All documents referred to in the accompanying Notice and the statement under Section 102 of the Act, shall be open for inspection at the Registered Office of the Company during normal business hours (9.30 a.m. to 5.30 p.m.) on all working days upto the date of the AGM.

16. Members holding shares in physical form are requested to address all correspondence relating to their shareholding in the Company to M/s. Karvy Fintech Private Limited, RTA or the Company. Members holding shares in dematerialised form may send such correspondence to their respective DPs.

17. As an eco-friendly measure intending to benefit the society at large, we request you to be part of the e-initiative and register your e-mail address to receive all communication and documents including Annual reports from time to time in electronic form to the e-mail address provided by you. Members holding shares in dematerialised form,may send such communication to their respective DPs and those holding shares in physical form, may send such communication to the RTA. Even after registering for e-communication, Members are entitled to receive communication in physical form upon making a request for the same.

18. Instructions for remote e-voting:

Pursuant to the provisions of Section 108 of the Companies Act, 2013 and Rule 20 of the Companies (Management and Administration) Rules, 2014 as amended from time to time and the provisions of Regulation 44 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, Members are provided with the facility to cast their vote electronically, through the e-voting services provided by M/s. Karvy Fintech Private Limited (Karvy) on all Resolutions set forth in this Notice.

Members may please follow the below instructions for e-voting:

A. In case a Member receives an e-mail from Karvy [for Members whose e-mail IDs are registered with the Company/Depository Participant(s)]:

i. Launch internet browser by typing the URL: *https://www.evoting.karvy.com*

ii. Enter the login credentials (i.e. User ID and password).In case of physical folio, User ID will be Event number 4661 (refer the Event number in the Attendance Slip) followed by folio number. In case of Demat account, User ID will be your DP ID and Client ID. However, if you are already registered with Karvy for e-voting, you can use your existing User ID and password for casting your vote.

iii. After entering these details appropriately, click on "LOGIN".

iv. You will now reach password change Menu wherein you are required to mandatorily change your password. The new password shall comprise of minimum 8 characters with at least one upper case (A-Z), one lower case (a-z), one numeric value (0-9) and a special character (@,#,$ etc.,). The system will prompt you to change your password and update your contact details like mobile number, e-mail ID etc. on first login. You may also enter a secret question and answer of your choice to retrieve your password in case you forget it. It is strongly recommended that you do not share your password with any other person and that you take utmost care to keep your password confidential.

v. You need to login again with the new credentials.

vi. On successful login, the system will prompt you to select e-voting event i.e., Carborundum Universal Limited. Now you are ready for e-voting as "cast vote" page opens.

vii. On the voting page, enter the number of shares (which represents the number of votes) as on the cut-off date under "FOR/AGAINST" or alternatively, you may partially enter any number in "FOR" and partially "AGAINST" but the total number in "FOR/AGAINST" taken together not exceeding your total shareholding as mentioned herein above. You may also choose the option ABSTAIN. If the Member does not indicate either "FOR" or "AGAINST" it will be treated as "ABSTAIN" and the shares held will not be counted under either head.

viii. Members holding multiple folios/demat accounts shall choose the voting process separately for each folio/demat account.

ix. Voting has to be done for each item of the Notice separately. In case you do not desire to cast your vote on any specific item it will be treated as abstained.

x. You may cast your vote by selecting an appropriate option and click on "Submit".

xi. A confirmation box will be displayed. Click "OK" to confirm else "CANCEL" to modify. Once you have voted on the resolution, you will not be allowed to modify your vote. During the voting period, Members can login any number of times till they have voted on the Resolution(s).

xii. Corporate/Institutional Members (i.e. other than Individuals, HUF, NRI etc.,) are also required to send scanned certified true copy (PDF) of the Board Resolution/ Authorisation Letter etc., together with attested specimen signature(s) of the duly authorised representative(s), to the Scrutiniser at rsaevoting@gmail.com with a copy marked to evoting@karvy.com. The scanned image of the above mentioned documents should be in the naming format "CUMI - 65th AGM".

B. Members holding shares in dematerialised form whose e-mail IDs are not registered with the Company/DPs and Members holding shares in physical form:

i. E-Voting Event Number - 4661 (EVEN), User ID and Password is provided in the Attendance Slip.

ii. Please follow all steps from sl. no. (i) to sl. no. (xii) above to cast your vote by electronic means.

C. Voting at AGM: Members who have not cast their vote electronically through remote e-voting, can exercise their voting rights at the AGM. The Company will make necessary arrangements in this regard at the Venue.

D. Other Instructions:

i. Any person who becomes a Member of the Company after despatch of Notice of the Meeting and holding shares as on the cut-off date i.e., 24th July 2019 may obtain the user ID and password by calling Toll Free No.1800 3454 001 or by sending an e-mail request to evoting@karvy.com.

ii. In case of of any queries, you may refer Help & FAQ section in *https://evoting.karvy.com* (Karvy website) or call Karvy on 040-67162222; Toll Free No.1800 3454 001.

iii. You can also update your mobile number and e-mail ID in the user profile details of the folio which may be used for sending future communication(s).

iv. The voting rights of Members shall be in proportion to their shareholding as on the cut-off date 24th July 2019.

v. The e-voting period commences on Saturday, 27th July 2019 (9.00 a.m. IST) and ends on Tuesday, 30th July 2019 (5.00 p.m. IST). During this period Members of the Company, holding shares either in physical form or in dematerialised form, as on the cut-off date i.e., 24th July 2019, may cast their vote electronically in the manner and process set out herein above. The remote e-voting module shall be disabled for voting thereafter. Once the vote on a resolution is cast by the Member, the Member will not be allowed to change it subsequently.

The Scrutiniser shall immediately after the conclusion of voting at the AGM first count the votes cast at the meeting, thereafter unblock the votes cast through remote e-voting in the presence of at least two (2) witnesses not in the employment of the Company and make a consolidated Scrutiniser's Report of the votes cast to the Chairman of the Company. For the purpose of ensuring that Members who have cast their votes through remote e-voting do not vote again at the Meeting, the Scrutiniser will have access, after closure of the period for remote e-voting for details relating to Members as the Scrutiniser may require except the manner in which the Members have cast their votes.

The results shall be declared on the date of the Meeting or not later than three days from the conclusion of the meeting. The results declared along with the Scrutiniser's Report shall be placed on the Company's website *www.cumi-murugappa.com,* as well as the website of Karvy i.e. *https://evoting.karvy.com* immediately after declaration of results by the Chairman/Authorised person and the Company shall simultaneously forward the results to NSE/BSE for placing it on their respective websites.

Voting facility will be provided to the Members who are not able to cast their vote electronically at the AGM venue. A Member can opt for only one mode of voting i.e. either through remote e-voting or voting at the AGM. If a Member casts votes by both modes, then voting done through remote e-voting shall prevail and the voting at AGM shall be treated as invalid. However, Members who have cast their vote by remote e-voting prior to the meeting can attend the meeting though they will not be entitled to cast their vote again.

Resolutions passed through e-voting would be deemed to have been passed as on the date of the AGM i.e., 31st July 2019.

ANNEXURE TO THE NOTICE

Statement pursuant to Section 102 of the Companies Act, 2013

As required under Section 102 of the Companies Act, 2013 (Act), the following statement sets out all material facts relating to the businesses mentioned under item nos. 4 to 9 of the accompanying Notice:

Item No.4

Mr. M M Murugappan is liable to retire by rotation at this AGM pursuant to Section 152(6) of the Companies Act, 2013 and being eligible has offered himself for re-appointment.

Mr. Murugappan's profile is provided in the Annual Report and the information pursuant to Regulation 36(3) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and Secretarial Standards on General Meetings is provided in the annexure. The Company has received the requisite consent and disclosure forms from him.

Mr. M M Murugappan, Chairman of the Board has been associated with the Company as a Director for more than two decades now. Given the size and nature of its operations and also the rich experience that Mr. Murugappan possesses in the field of engineering, a considerable amount of time is spent by him in connection with the operations of the Company. Apart from playing an active role in guiding and advising on matters connected with strategy and management, he spends considerable time on developing/managing relationships with the Company's business partners both in India and overseas. The Chairman also plays an active role in matters connected with CUMI's organisation culture which is critical for the Company to deliver superior performance besides devoting time for technology related issues impacting the Company. Further, the Chairman spends a lot of time participating in various events, conclaves and functions of Industry bodies, Academic Institutions and interactions with high level State Authorities representing the Company. Under his chairmanship, the Company has grown globally from ₹4060 million to over ₹23000 million.

The Board considers that the continued association of Mr. Murugappan including as a Chairman would be of immense benefit to the Company and hence it is desirable to continue to avail his services as a Director. Further, the Board believes that the remuneration payable to him is commensurate with the efforts and the time taken by him on behalf of the Company. Accordingly, the Board recommends his re-appointment as a Director.

Memorandum of Interest

Except Mr. M M Murugappan, being the appointee, none of the other Directors or Key Managerial Personnel of the Company or their relatives is interested or concerned, financially or otherwise in the aforesaid resolution proposed to be passed as an Ordinary Resolution.

Item No.5

Mr. Aroon Raman was appointed as an Independent Director at the 60th Annual General Meeting (AGM) held on 1st August 2014 for a period of 5 years from the AGM date. His term of office as an Independent Director will expire at the close of business hours on 31st July 2019. Pursuant to Section 149 (10 & 11) of the Companies Act, 2013, an Independent Director can hold office for two consecutive terms of upto five years each on the Board. However, the approval for the second term is required to be obtained from the shareholders vide a special resolution by providing requisite disclosures of such appointment in the Board's report.

Mr. Aroon Raman aged 59 years holds a Master's degree in Economics from Jawaharlal Nehru University, New Delhi and an MBA from Wharton School, USA. He was the Managing Director of Raman Boards and Raman Fibre Science Private Limited. His profile is provided in the Annual Report and the information under Regulation 36(3) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and Secretarial Standards on General Meetings is provided in the annexure. The Company has received the requisite consent and disclosure forms from him. Mr. Aroon Raman was paid a sitting fee of ₹0.29 million for attending the meetings of the Board and Committees thereof. A commission of ₹0.75 million is payable for the FY 2018-19 to Mr. Aroon Raman.

The Company has received a Notice in writing from a Member under section 160 of the Companies Act, 2013 proposing Mr. Aroon Raman's candidature for the office of Director. In the opinion of the Board, Mr. Aroon Raman satisfies the criteria prescribed in the Act and Rules made thereunder and SEBI (Listing Obligations and Disclosure Requirement) Regulations, 2015 for re-appointment as an Independent Director of the Company and that he is independent of the Management. Accordingly, the Board of Directors have recommended his re-appointment as an Independent Director for a term of five (5) consecutive years from 1st August 2019 in terms of Section 149(10) of the Act.

The Nomination and Remuneration Committee at its meeting held on 26th April 2019 on the basis of the performance evaluation conducted and further considering Mr. Raman's technical & management expertise, business knowledge and significant contribution made by him during his tenure, has recommended to the Board his re-appointment as an Independent Director. The performance evaluation of Independent Directors was based on various factors including attendance at Board and Committee Meetings, familiarity with the Company's policies and values, ability to objectively communicate views/concerns on matters discussed at the meetings, exercise own judgement and voice out opinions besides having an understanding of the industry trends.

In furtherance to the Committee's recommendation and Mr. Aroon Raman's performance evaluation undertaken in the past, the Board believes that his continued association would be beneficial to the Company and hence recommends his re-appointment as an Independent Director for a term of five (5) consecutive years commencing from 1st August 2019.

Mr. Aroon Raman would be entitled to sitting fees for attending the Meetings of the Board of Directors and Committees thereof. Further, he would be entitled to commission on profits as determined each year by the Board within the overall limits not exceeding one per cent of the net profits of the Company as approved by the shareholders at the 64th Annual General Meeting held on 3rd August 2018.

The draft letter of appointment setting out the terms and conditions of his appointment is available on the website of the Company and would also be available for inspection without any fee by the Members at the Company's Registered Office during normal business hours on any working day upto the date of the AGM.

Memorandum of Interest

Except Mr. Aroon Raman being the appointee, none of the other Directors or Key Managerial Personnel of the Company or their relatives is interested or concerned, financially or otherwise in the aforesaid Special Resolution.

Item No.6

Mr. Sanjay Jayavarthanavelu was appointed as an Independent Director at the 60th Annual General Meeting (AGM) held on 1st August 2014 for a period of 5 years from the AGM date. His term of office as an Independent Director will expire at the closing hours of 31st July 2019. Pursuant to Section 149 (10 & 11) of the Companies Act, 2013, an Independent Director can hold office for a term up to two consecutive terms of upto five years each on the Board. However, the approval for the second term is required to be obtained from the shareholders vide a special resolution by providing requisite disclosures of such appointment in the Board's report.

Mr. Sanjay Jayavarthanavelu aged 50 years holds a Masters degree in Business Administration from Philadelphia University, USA. He has more than two decades of experience in the fields of textile engineering, Machine Tools manufacture, finance and administration. His profile is provided in the Annual Report and the information under Regulation 36(3) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and Secretarial Standards on General Meetings is provided in the annexure. Mr. Sanjay Jayavarthanavelu was paid a sitting fee of ₹0.33 million for attending the meetings of the Board and Committees thereof. A commission of ₹0.75 million is payable for the FY 2018-19 to Mr. Sanjay Jayavarthanavelu.

The Company has received a Notice in writing from a Member under section 160 of the Companies Act, 2013 proposing Mr. Sanjay Jayavarthanavelu's candidature for the office of Director. In the opinion of the Board, Mr. Sanjay Jayavarthanavelu satisfies the criteria prescribed in the Act and Rules made thereunder and SEBI (Listing Obligations and Disclosure Requirement) Regulations, 2015 for re-appointment as an Independent Director of the Company and that he is independent of the Management. Accordingly, the Board of Directors have recommended his re-appointment as an Independent Director for a term of five (5) consecutive years from 1st August 2019 in terms of Section 149(10) of the Act.

The Nomination and Remuneration Committee at its meeting held on 26th April 2019 on the basis of the performance evaluation conducted and further considering Mr. Sanjay's management expertise, business knowledge and significant contribution made by him during his tenure, has recommended to the Board his re-appointment as an Independent Director. The performance evaluation of Independent Directors was based on various factors including attendance at Board and Committee Meetings, familiarity with the Company's policies and values, ability to objectively communicate views/concerns on matters discussed at the meetings, exercise own judgement and voice out opinion besides having an understanding of the industry trends.

In furtherance to the Committee's recommendation and Mr. Sanjay Jayavarthanavelu's performance evaluation undertaken in the past, the Board believes that his continued association would be beneficial to the Company and hence recommends his re-appointment as an Independent Director for a term of five (5) consecutive years commencing from 1st August 2019.

Mr. Sanjay Jayavarthanavelu would be entitled to sitting fees for attending the Meetings of the Board of Directors and Committees thereof. Further, he would be entitled to commission on profits as determined each year by the Board within the overall limit not exceeding one per cent of the net profits of the Company as approved by the shareholders at the 64th Annual General Meeting held on 3rd August 2018.

The draft letter of appointment setting out the terms and conditions of his appointment is available on the website of the Company and would also be available for inspection without any fee by the Members at the Company's Registered Office during normal business hours on any working day upto the date of the AGM.

Memorandum of Interest

Except Mr. Sanjay Jayavarthanavelu being the appointee, none of the other Directors or Key Managerial Personnel of the Company or their relatives is interested or concerned, financially or otherwise in the aforesaid Special Resolution.

Item No.7

Mr. K Srinivasan was re-appointed as the Managing Director of the Company by the Board for a term commencing from 23rd November 2017 to 22nd November 2019 subject to the shareholder's approval which was obtained on 31st July 2017. As Mr. Srinivasan's tenure as the Managing Director would be expiring at the close of business hours on 22nd November 2019, the Board based on the recommendation of the Nomination and Remuneration Committee considered the candidature of Mr. N Ananthaseshan to succeed Mr. Srinivasan as the Managing Director of the Company and has recommended his appointment for the approval of the shareholders at the 65th Annual General Meeting.

Mr. N. Ananthaseshan aged 56 years holds a M. Tech degree in Material Science from IIT Kharagpur and also holds a Master's degree in Applied Science. He is heading the Abrasives division of the Company since February 2014 and was earlier the Senior Vice President of its Electrominerals division, thus having experience across business verticals of the Company. He joined CUMI as a graduate engineer trainee in 1986 and has been with the Company since his career beginning. His areas of expertise include fine powder processing technology, project management, strategic planning, strategic sourcing, global sourcing and e-procurement methodologies. Team building, value creation, people orientation, mentoring and application of technical knowledge for business results are his strengths.

The information under Regulation 36(3) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and Secretarial Standards is provided in the annexure.

The Nomination and Remuneration Committee at its meeting held on 26th April 2019 considered the appointment of Mr. Ananthaseshan as an Additional Director including as a Director in executive capacity [Managing Director (Designate)] with effect from 26th April 2019 whose appointment as the Managing Director would take effect from 23rd November 2019 after the completion of the tenure of Mr. K Srinivasan. Considering Mr. Ananthaseshan's vast experience and strong technical and management expertise, the Board recommends his appointment as the Managing Director (Designate) with effect from 26th April 2019 and Managing Director effective 23rd November 2019 to the shareholders. The Nomination and Remuneration Committee considered and recommended the terms of his appointment including the remuneration payable to him. The required consent and disclosure forms have been received from Mr. Ananthaseshan.

Mr. N Ananthaseshan holds 69,023 equity shares in the Company and details of the Stock Options granted to him are given below:

Grant Date	ESOP 2007		ESOP 2016
	29/09/2007	27/01/2011	04/02/2017
Options granted	121,800	78,600	93,120
Options vested	105,966	62,880	37,248
Options cancelled	15,834	15,720	-
Options lapsed	-	-	-
Options exercised	105,966	44,016	-
Options outstanding	-	18,864	93,120
Exercise Price	₹91.80	₹125.08	₹257.55

The Board recommends Mr. N Ananthaseshan's appointment for approval by the Members of the Company.

Memorandum of Interest

Except Mr. N Ananthaseshan being the appointee, none of the other Directors or Key Managerial Personnel of the Company or their relatives are interested or concerned, financial or otherwise in the aforesaid Ordinary Resolution.

Item No.8

The shareholders at the 64th Annual General Meeting held on 3rd August 2018 had approved the payment of remuneration to Non-Executive Directors of the Company not exceeding one per cent of the net profits of the Company.

In line with the Remuneration Policy of the Company, the compensation to the Non-Executive Directors takes the form of commission on profit. Though shareholders have approved payment of commission up to one per cent of net profits of the Company for each year, the actual commission paid to the Directors is restricted to a fixed sum within the above limit. This sum is reviewed periodically taking into consideration various factors such as performance of the Company, time spent by the Directors for attending to the affairs and business of the Company and extent of responsibilities cast on Directors under general law and other relevant factors. In keeping with evolving trends in industry and considering the increased time spent by Mr. M M Murugappan, he is paid a differential commission.

Mr. M M Murugappan, Chairman has been associated with the Company as a Director for more than two decades now. Given the size and nature of its operations and also the rich experience that Mr. Murugappan possesses in the field of engineering, a considerable amount of time is spent by him in connection with the operations of the Company. Apart from playing an active role in guiding and advising on matters connected with strategy and management, he spends considerable time on developing/ managing relationships with the Company's business partners both in India and overseas. The Chairman also plays an active role in matters connected with CUMI's organisation culture which is critical for the Company to deliver superior performance besides devoting time for technology related issues impacting the Company. Further, the Chairman spends a lot of time participating in various events, conclaves and functions of Industry bodies, Academic Institutions and interactions with high level State Authorities representing the Company. Under his chairmanship, the Company has grown globally from ₹4060 million to over ₹23000 million. He is currently the Executive Chairman of the Murugappa Group.

Pursuant to Regulation 17(6)(ca) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, the approval of shareholders by special resolution is required to be obtained every year, in which the annual remuneration payable to a single Non-Executive Director exceeds fifty per cent of the total annual remuneration payable to all Non-Executive Directors.

During the FY 2018-19, Mr. M M Murugappan was paid a commission of ₹10 million (commission for the FY 2017-18) and a sitting fee of ₹0.21 million. Since the total remuneration payable to Mr. M M Murugappan during the FY 2019-20 including the commission payable for the FY 2018-19 is likely to exceed fifty per cent of the total remuneration payable to all Non-Executive Directors, approval of the shareholders is sought vide a special resolution.

The Board believes that the remuneration payable to Mr. Murugappan is commensurate with the efforts and the time taken by him on behalf of the Company. Accordingly, the Board recommends remuneration payable to Mr. M M Murugappan during the FY 2019-20 in excess of fifty per cent of the total annual remuneration payable to all Non-Executive Directors of the Company for approval by the Members of the Company.

Memorandum of Interest

Except Mr. M M Murugappan, being the appointee, none of the other Directors or Key Managerial Personnel of the Company or their relatives is interested or concerned, financially or otherwise in the aforesaid resolutions proposed to be passed as a Special Resolution.

Item No.9

Pursuant to the Companies (Cost Records and Audit) Rules, 2014 and any amendments thereof, the Company is required to maintain cost accounting records in respect of products of the Company covered under CETA categories like organic and inorganic chemicals, electrical or electronic machinery, steel, plastic and polymers, ores and mineral products, other machinery, base metals etc. Further, the cost accounting records maintained by the Company is required to be audited. The Board on the recommendation of the Audit Committee, has approved the appointment and remuneration of M/s. S Mahadevan & Co., Cost Accountants, as the Cost Auditor to conduct the audit of the cost accounting records of the Company pursuant to the Companies (Cost Records and Audit) Rules, 2014 for the financial year 2019-20 on a remuneration of ₹4,50,000/- excluding applicable taxes and out of pocket expenses incurred by them in connection with the Audit.

As per Section 148 of the Companies Act, 2013, the remuneration payable to the Cost Auditor is required to be ratified by the shareholders of the Company. Hence, the Ordinary Resolution at item no.9 is placed before the Members for ratification and the Board recommends the same.

Memorandum of Interest

None of the Directors or Key Managerial Personnel of the Company or their relatives is concerned or interested, financially or otherwise, in the aforesaid Ordinary Resolution.

By Order of the Board

Chennai, **Rekha Surendhiran**

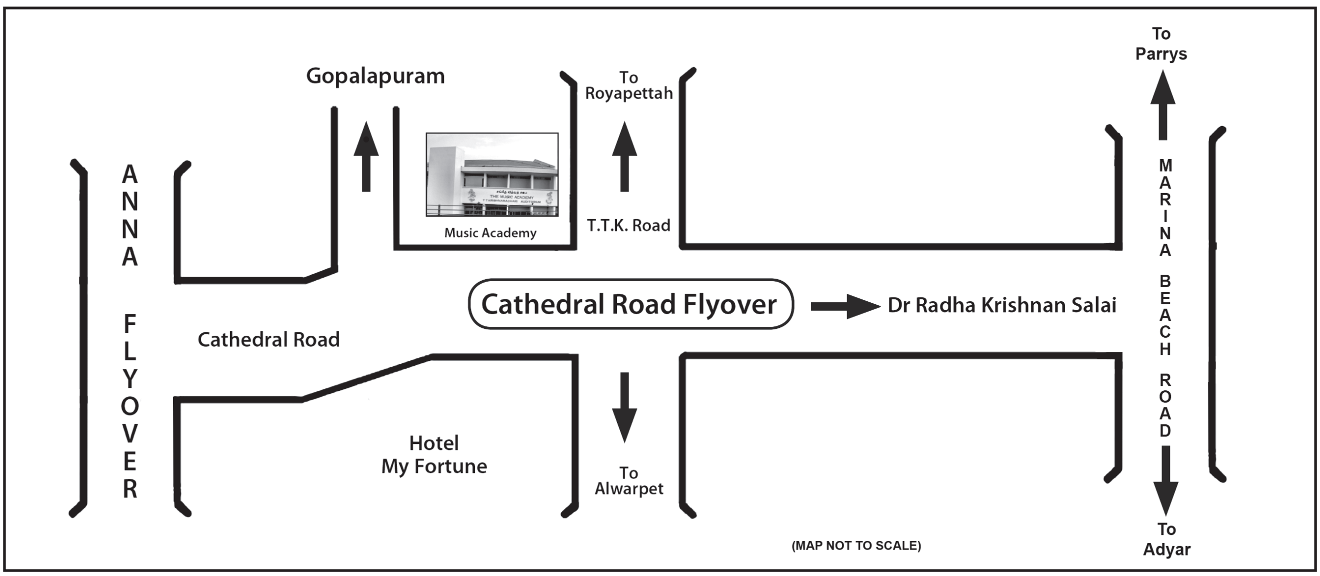
April 26, 2019 *Company Secretary*

Disclosure under Reg. 36 (3) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and Clause 1.2.5 of Secretarial Standards on General Meetings

Name of Director	M M Murugappan	Sanjay Jayavarthanavelu	Aroon Raman	N Ananthaseshan
DIN	00170478	00004505	00201205	02402921
Date of Birth	12.11.1955	15.06.1968	21.03.1960	14.12.1962
Date of Appointment (Initial)	17.10.1996	27.10.2010	30.10.2013	26.04.2019
Qualification	Bachelor of Technology in Chemical Engineering from the University of Madras, Masters degree in Chemical Engineering from the University of Michigan, USA.	Masters degree in Business Administration from Philadelphia University, USA	Masters degree in Economics from JNU, New Delhi and in Business Administration from the Wharton School, USA	M.Sc (Applied Sciences) & M Tech Material Sciences from the Indian Institute of Technology, Kharagpur.
Expertise in specific functional areas	Has over four decades of experience in diverse areas of Technology, Research & Development, Strategy & Business Development and Human Resources.	Has close to two decades of experience in the fields of textile engineering, Machine Tools manufacture, finance and administration.	Has over three decades experience in varied fields of technology, operations, general management, research & development.	He has over two decades of experience in Electrominerals & Abrasives. He is with CUMI since 1986 heading the Abrasives division.
Directorships in other companies (including foreign companies)	Tube Investments of India Limited Cholamandalam Financial Holdings Limited Cholamandalam MS General Insurance Company Limited Coromandel International Limited Cholamandalam Investment and Finance Company Limited Volzhsky Abrasive Works, Russia M M Muthiah Research Foundation Mahindra & Mahindra Limited Ambadi Investments Limited Murugappa Organo Water Solutions Pvt. Ltd. iDea Lab (India) Pvt. Ltd. Cyient Limited IIT Madras Research Park Chennai Willingdon Corporate Foundation	Lakshmi Machine Works Limited Super Sales India Limited Lakshmi Life Sciences Limited Lakshmi Electrical Control Systems Limited The Lakshmi Mills Company Limited Lakshmi Cargo Company Limited Lakshmi Technology and Engineering Industries Limited Lakshmi Ring Travellers (Coimbatore) Limited Chakradhara Aerospace and Cargo Pvt. Ltd. Alampara Hotels and Resorts Pvt. Ltd.	Wheels India Limited Brigade Enterprises Limited TVS Automobile Solutions Pvt. Ltd. Nettur Technical Training Foundation Telos Investments & Technologies Pvt. Ltd. Edutech Nttf India Pvt. Ltd.	Sterling Abrasives Limited CUMI Middle East FZE CUMI Abrasives and Ceramics Company Limited CUMI America Inc. Volzhsky Abrasive Works, Russia
Memberships in Board Committees of other companies (includes membership details of all Committees)	**Tube Investments of India Limited** Stakeholders Relationship Committee - Chairman Nomination and Remuneration Committee - Member **Cyient Limited** Audit Committee, Nomination and Remuneration Committee, Risk Management Committee - Member **Mahindra and Mahindra Limited** Audit Committee, Risk Management Committee - Member Nomination and Remuneration Committee - Chairman **Cholamandalam Financial Holdings Limited** Stakeholders Relationship Committee, Corporate Social Responsibility Committee, Risk Management Committee - Chairman Nomination and Remuneration Committee, Share Transfer Committee - Member **Ambadi Investments Limited** Borrowing Committee, Corporate Social Responsibility Committee - Member **Cholamandalam MS General Insurance Company Limited** Management Committee, Corporate Social Responsibility Committee, Investment Committee, Business Committee - Chairman Nomination & Remuneration Committee, Risk Management Committee - Member **Cholamandalam Investment and Finance Company Ltd.** Corporate Social Responsibility Committee, Risk Management Committee - Member Business Committee - Chairman	**Lakshmi Machine Works Limited** Corporate Social Responsibility Committee, Shares & Debentures Committee - Chairman **Super Sales India Limited** Share Transfer Committee - Member **Lakshmi Cargo Company Limited** Audit Committee - Member Corporate Social Responsibility Committee, Nomination and Remuneration Committee - Chairman **Chakradhara Aerospace and Cargo Private Limited** Corporate Social Responsibility Committee - Member	**Wheels India Limited** Audit Committee, Corporate Social Responsibility Committee, Nomination & Remuneration Committee - Member **Brigade Enterprise Limited** Audit Committee - Member Nomination and Remuneration Committee - Chairman **TVS Automobile Solutions Pvt. Ltd.** Audit Committee, Nomination and Remuneration Committee - Member	-
No. of shares in the Company	696,340	Nil	Nil	69,023
Inter-se relationship with any other Directors or KMP of the Company	Nil	Nil	Nil	Nil

Note: For further details, please refer the Corporate Governance Report section of the Annual Report.

ROUTE MAP TO AGM VENUE



Ushering in the Carbon Age

CARBORUNDUM UNIVERSAL LIMITED

ANNUAL REPORT 2018-19

CONTENTS

Note: Across this Report, the word "CUMI" refers to "Carborundum Universal Limited."

The wrapper shows image of our Graphene products on the humanoid robot, denoting the application possibilities of this wonder material in super intelligent systems that would be an integral part of the Carbon Age.

Ushering in the Carbon Age

All through human history, new materials have ushered in a new age of development and progress- Stone Age, Bronze Age, Iron Age, etc.

The Industrial Age started with the large scale production based on metals. The Information / Digital Age grew on the back of the Silicon wafer. The ever growing need for computing power as exemplified by the Moore's Law will simply run out of runway with the Silicon wafer. As we look ahead to usher in the Experience or Imagination Age we need a new material and this is going to be CARBON - be it as Graphene or as Carbon Nano tubes (CNT). Artificial Intelligence (AI), Big Data Analytics (BDA), Machine Learning (ML) etc., all need a computational capability that cannot be met with the current materials. Going forward, Singularity - the hypothetical creation of super intelligent machines with technologically created cognitive capacity far beyond what is possible by man - can only happen with these New Materials.

We are entering into a world that is not just speed-changing but transforming multi-dimensionally. With the discovery of new materials, unexplored possibilities are being imagined and waiting to be created.

CUMI a Material Science Company, has always been in the forefront of new technologies, harnessing the various properties of materials to make cutting edge products.

Beginning with its charter of Making Materials for Man' and progressing to 'Making Materials Matter', the Company, is today on the threshold of another exciting transition - making 'Materials that Matter' in a New Age of Imagination and Virtuo-real Experience. A world, where the linear concept of space, time and momentum is getting redefined. A world, ushering in the Carbon Age - with New Age Materials, New Age Science.

Ushering in the Carbon Age

Edge creation with patent focused product and process innovation.

ELECTROMINERALS

At CUMI, we make the widest range of Fused and Non Fused minerals for the Abrasives, Refractory, Ceramic, Metallurgical and Auto industry. With over 140K tons produced at the various CUMI plants across 3 countries, we are one of the leading global players in this space.

The Minerals and Materials industry is moving towards high performance, high purity and cost effective materials. Our ability to make high quality, customized fused minerals remains a key technological competence that serves as a competitive edge for our businesses. The Company has progressively built capabilities to develop Non Fused materials like Ceramic Grains for critical, high end applications, Nebulox-Ultra-light bubble refractory and now Graphene / CNT under the brand name, 'Grafino'.

High purity Graphene

At the Electrominerals division, R&D initiatives were driven by facility creation and capability building for a line of exciting New Age products.

- A state-of-the-art facility has been created in SEZ, Kakkanad to produce Polymer composite master batches for making high strength polymers, Functionalised Graphene and high purity Carbon Nano tubes.

- Established the Boehmite production facility to enable unhindered global expansion in the sol-gel range of products, This will provide capability to produce high purity Aluminas for various applications like engineered Ceramics, LED substrates, electronics, catalysts, 3D printing, etc.

- A patented process for NextGen Alumina Zirconia including the process for polycrystalline Alumina and a variety of Fused Magnesias are nearing commercialisation.

- High performance engineered solgel grains has been developed and introduced as a new variant for high grinding ratio, faster cutting rates and better finish.

- Nebulox ultra-light, porous, high temperature insulation material was developed.

- With the increasing emphasis on electric vehicles, the business is focusing on materials for Li-ion batteries.

- Technical collaborations were entered into for developing plasma sprayed Ceramic membranes and Nano materials.

Our Vision is to be a co-creator of various things that go into the Experience world. Like materials for the batteries that will drive the Electric Vehicle (EV) revolution; Silicon Carbide for electronic applications; High Surface area powders for 3D printing - the possibilities are immense.

The Graphene facility at SEZ, Kakkanad.

Ushering in the Carbon Age

Strong Domain Knowledge and Application Engineering Expertise.

CUMI's Abrasives business prepared the path for ushering in the Carbon Age with value-led innovation, cutting edge products for New-Gen applications, strategic technical partnerships, strong domain experience and solution driven engineering expertise.

A cluster of New-Gen Abrasives products

ABRASIVES

Leveraging its application engineering expertise, the Company focused on partnering with customers and machine tool manufacturers, to create Intelligent grinding systems and breakthrough products for New Age applications and processes. With 'Engineering Surfaces' as its prime focus, the Abrasives division developed new products and innovative solutions based on deep insight gained from end-user applications.

Some of the new products developed during the year:

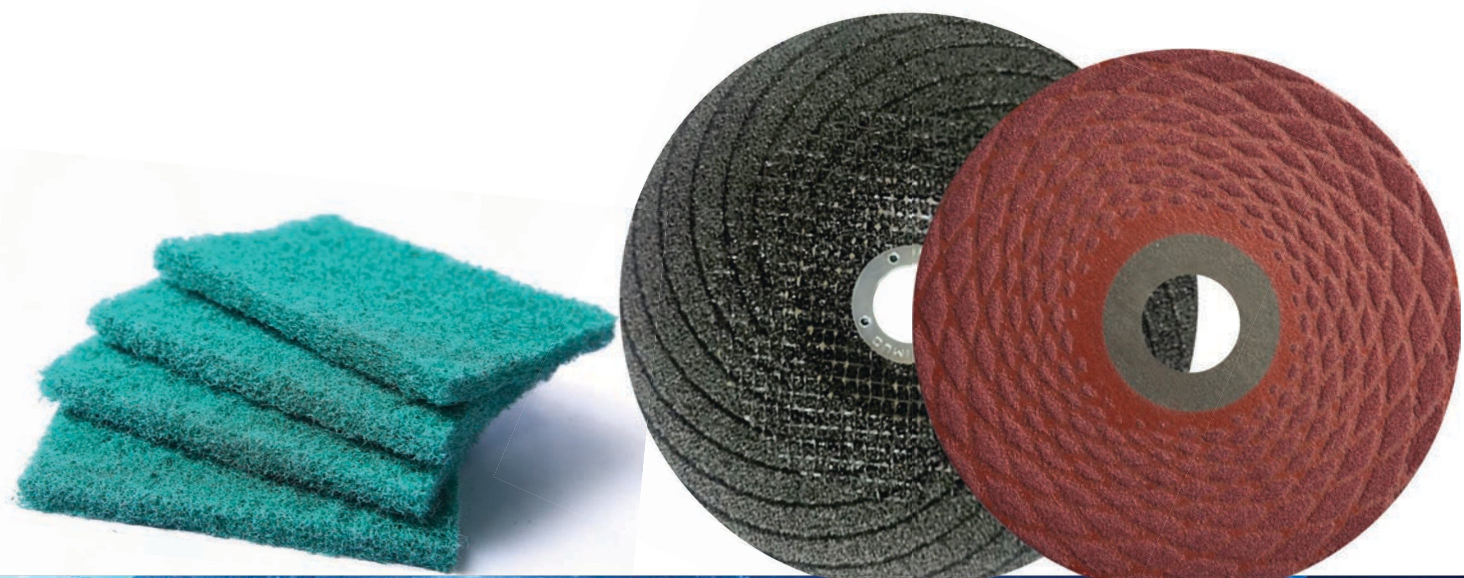
Bonded Abrasives

- High performance Grinding and Lapping wheels with unparalleled grit and size range for a complete spectrum of Ball finishing solutions.
- High performance 'CN' range of Internal grinding wheels with specially graded Micro-crystalline grains using a unique vitreous bond for the Bearing industry.
- 'Q Bond' range of Micro-crystalline Aluminium Oxide based Grinding wheels, combining the benefits of high material removal and low grinding force with 4X performance compared to conventional Grinding wheels.
- Spiral grooved, thin DC wheels for hand-held grinding offering dust free operations, controlled wear and exceptional freedom of cut.

Coated Abrasives

- High performance Zirconia and Aluminium Oxide products based on heavy duty Polyester for metal applications. Uniform grain coating offers aggressive material removal and even finish.
- Developed a complete range of superior performance Film Backed Abrasives using a combination of specially graded premium Abrasives with specialty resins addressing a wide spectrum of operations from high end automotive applications to fine sanding of wood.
- High performance Latex Water proof paper for Auto after-applications.
- New range of Cloth based discs with premium Aluminium oxide grains on specially designed cloth, for dust free metal sanding for automotive applications.
- Stearate coated Latex paper products for wood sanding applications with anti-loading characteristics.
- A new range of high performance Non-woven products for Industrial applications were launched and scaled up.

Expanding global presence in Super Abrasives, leveraging channel strength to mine new opportunities, foraying into adjacencies, viz. Masking tapes, Power Tools, etc., securing bridgehead in major markets such as US and Europe through technical partnerships - CUMI's Abrasives division has drawn up an ambitious charter for growth.



Ushering in the Carbon Age

Coated Maker Plant at Sriperumbudur, with IoT enabled operations.

Ushering in the Carbon Age with automation, integrated operations, future-ready multi-technology platforms, IoT enabled smart factories.

CUMI manufactures a comprehensive product range which includes, Bonded, Coated, Super Abrasives, Ceramics, Electrominerals and Coolants for a wide spectrum of industries. With over 30 state-of-the-art plants spread across the globe, the Company, is one of the largest players in the Material Science space, with cutting edge products and solutions.

CUMI is forging ahead with a digital integration of operations, expanding capacities, investing in advanced processes and building new and agile capabilities, with interoperability and a clear focus on the dynamics of a fast changing world.

Expansions, modernisation and infusion of advanced process capabilities were undertaken across the different businesses - the Coated Maker facility at Sripermbudur, Super Refractories Plant at Jabalpur, Alumina and Graphene Plants at Cochin, Thin Wheel Plant at Maraimalai Nagar, Polymer Composites Plant at Ranipet, the Metallised Cylinder Plant at Hosur and the Refractories Plant at VAW, Russia. This will further bolster the Company's capability to manufacture new and value-led innovative products for niche and emerging markets.

CUMI continues to focus on the 5 key constituents in formulating and driving strategy: Technology, Customers, Employees, Shareholders and the Society. Technological disruptions will drive changes in behavior and shape the needs of customers, employees and society at large. CUMI with its 7 DSIR approved labs and focus on innovation is working relentlessly to remain ahead of the curve.

Ushering in the **Carbon Age**

Range of Thin Film Tape Casting Products & Manufacturing facility at Hosur.

At CUMI, we innovate and co-create industry defining products, foraying into white spaces in our relentless pursuit of excellence.

CERAMICS

We are a global player in Industrial and Engineered Ceramics. We co-create products with world leaders in the space of Solid Oxide Fuel cells, Vacuum circuit breaker bottles, Oxygen sensors, Lined equipment for various mills, Conveyors, Pulverizers, etc.

Introduced a range of new products for critical applications in niche segments.

- ZTA Ceramic Tiles embedded in rubber for High Impact Resistant applications.
- Wear Ceramics for transfer and liner chutes, feeder box assemblies, etc with complex geometries for critical operations in mining.
- Lined Equipments in complex shapes and sizes - ceramic liners for hoppers & bunkers in mining.
- Non Oxide, Ceramic - sintered Silicon Carbide products for high capacity heat exchangers.
- Gold sputtered tape cast Ceramics for high density packaging of power electronics.
- Commissioned a facility for manufacturing Thin Film Tape Casting products.
- Leveraging cross divisional competencies and domain expertise, the Industrial Ceramics division, in synergistic collaboration with Electrominerals is working on New Age technologies in powder processing and characterization, molding, sintering, machining and other related processes.

A passion for excellence, a drive to redefine and the will to cut a new path - at the Ceramics division, ushering in the Carbon Age dictated the roadmap of the future.

Range of Non-Oxide Ceramic Products

Ushering in the Carbon Age

Environmentally Responsible Technologies and products that provide solutions for a New Age.

Prodorite

CUMI's Prodorite division built capability in vacuum infusion technology to manufacture large composite panels for various applications.

As the adoption of Green Energy systems gain in popularity across the world, the Company has mapped out plans to expand its presence in the Wind, Automotive and Railway space.

Manufacturing of Nacelle Covers for wind turbines has already started at the Ranipet facility for select customers in wind energy generation.

The Company has also established the capability to manufacture epoxy and polyurethane based adhesives, with high structural strength for Ceramic tile lining in coal handling applications in power plants.

High strength adhesives for bonding applications in Flap Discs, Mop Wheels were developed for the Coated Abrasives industry.

The Company has invested in the technology to manufacture abrasion and corrosion resistant composites for critical applications, in mineral processing and in flue gas desulphurisation units to remove pollutants in coal-fired power plants.

With the global mandate on reducing emissions gaining ground, this business is estimated to grow significantly over the next 5 years.

Super Refractories

The Super Refractories division leveraged its strong engineering expertise to manufacture complex shape products for critical applications in key segments such as Carbon Black, Petro-chemicals, etc.

Participated in expansion and revival projects in glass, carbon black and metallurgical industries.

Customer satisfaction through process improvement initiatives, TPM in manufacturing and quality assurance led to the growth of the business.

New, environmentally responsible products were developed for niche segments:

- Superior oxidation resistant refractory tile for waste incineration.
- Mullite based castables for cement industry.
- Pre-cast, bottom paving blocks for float glass for the global market.

Focus on quantum growth in castable and pre-cast products for the iron & steel, cement and glass industries and high performance specialty products for the export market are strategic plans for ushering in the Carbon Age.

Nacelle cover for wind turbines

Ushering in the **Carbon Age**

Building capability through customer co-partnering and solution-led synergistic work ventures.

At CUMI, Customers and Channel Partners are our prime focus. We work seamlessly with them through Joint Development Projects (JDP) to address their requirements and provide solutions to give them a competitive edge. The use of IT enabled processes has made the transactions more transparent and collaborative.

We participate in several domestic and global exhibitions and conferences not only for greater visibility but also to connect with our customers and explore opportunities in new and emerging markets.

Our integrated, solution driven and customer-centric work discipline facilitates an easy transition to a New Age of co-creation and value building.

Ushering in the Carbon Age

Scale and Globally integrated operations.

Volzhsky Abrasive Works, Russia, (VAW), the second largest producer of silicon carbide, gives us the scale and capability to address emerging markets in the Carbon Age. The Company also manufactures Abrasives and Refractory products for the global market. During the year, the Company was conferred the Award for 'Best Organisation' in the Volgograd region while Mr. Sergey Kostrov, the General Director of VAW, received the Certificate of Honour for Excellence in development of industries and long standing dedicated work from the Ministry of Industries & Trade.

Mr. M M Murugappan, Chairman with the VAW team in a meeting with Mr. Andrey Bocharov, the Governor of Volgograd, Russia.

Ushering in the Carbon Age

CUMind

Innovation and design thinking to accelerate the transition to the Imagination Age - the Carbon Age.

CUMind - a customized Innovation Hub, based on the Design Thinking methodology was launched as a physical space at the Sriperumbudur Plant. Built out of recycled shipping containers and equipped with creative tool kits and other paraphernalia to aid the innovation process, this unique space is being used for design thinking workshops and brainstorming sessions. A number of DOT workshops have been conducted to seed the design thinking methodology across divisions and cross-functional teams. Six projects are underway for development of breakthrough products, process and improvements to accelerate the transition to the imaginative Age -the Carbon Age.

Ushering in the Carbon Age

Empowered, engaged and future-driven people resource.

CUMI believes that a committed and engaged people resource is its greatest strength. Over 8,000 employees, across the CUMI Group, including trainees and apprentices, are working in tandem on New Age technologies, innovative product streams, robust processes and systems, to usher in the Carbon Age.

Focused employee engagement initiatives with an online Rewards and Recognition portal helps to provide employees greater visibility and opportunity to collaborate across businesses while on-demand mentoring programmes facilitate capability building. 'Re-imagining HR,' a strategic framework of HR processes is being drawn to suit the changing generational and work needs of the future.

Ongoing programmes of Learning & Development ensure that the employees meet their Individual Development Plan (IDP) with opportunities to build their knowledge and enhance their capabilities. Access to structured and specialised courses in conjunction with leading educational institutions are provided. General Management and Leadership Development through the in-house CUMI Leadership Programme (CLP) being jointly run with Great Lakes Institute or the Business Leadership/ Young Leader programmes (BLP/ YLP) run with the Murugappa Development Centre and IIM, Ahmedabad, helps groom leaders of the future.

The several awards and accolades received during the year are a testimony to the people excellence in the Company.

Frost & Sullivan India Manufacturing Excellence Award 2018

Supplier of the Year Award by Siltronics, Germany

Golden Peacock Award for Business Excellence and Innovation

ISTD Award for Innovative Training Practices

ICAI - Silver Award for Annual Report 2017-18 for Excellence in Financial Reporting

ABCI Award for Communication

'Commendation for Energy Conservation' from Energy Management Centre, Government of Kerala.

CUMI emerged on top of the score board at the 'Pride of Murugappa Awards -2018 for Best Practices among the Group companies.

Ushering in the
Carbon Age

Community welfare & socially responsible practices.

CUMI is mindful of its larger responsibility to the Society in which it operates. All our factories are OHAS certified Green plants with sustainable practices, zero discharge processes and rain water harvesting systems. The abundant green cover, with a large number of trees, aviaries, fish and duck ponds, lend these plants a resort like ambience.

The Company's CSR activities focus on five focus areas - Honing Skills Shaping Lives (vocational training initiatives), Little Millennials (childcare and education initiatives), Care & Concern (community welfare initiatives), Awakening (entrepreneurship initiatives) and Beyond Footprints (green and eco-care initiatives). CUMI's Centre for Skill Development (CCSD) provides youngsters from under privileged backgrounds training in certified technical courses and on-the-job skills for employability. Around 120 students graduated with flying colours from the two Skill Development Centres at Hosur and Kerala. To take this initiative further, a similar Centre has been opened at Ranipet.

CUMI, through the AMM foundation, supports schools and Hospitals that cater to the underprivileged and needy.

The Company participated in large measure to help in the disaster relief work during the calamities wrought by the cyclone in Tamil Nadu and the deluge that wrecked the State

Students of the Centre enjoying themselves

Skill Development Centre, Hosur

Skill Development Centre, Hosur

of Kerala. Contributing to the Government's Relief Fund, providing food and items of basic necessity, arranging medical care, clearing the roads of debris and restoring power connections - CUMI played its part with great commitment, reinforcing the Spirit of 'Responsibility' as outlined in the Five Lights of the Murugappa Group.

The Five Lights of the Murugappa Group

Flood relief support to schools in Kerala

Installing solar lights to restore power at Nallur

Pond after desilting work at Nallur

Pond before desilting work at Nallur

Ushering in the Carbon Age

Board & Leadership Team

Sitting L-R: Mr. Sanjay Jayavarthanavelu, Mr. M A M Arunachalam, Mr. M M Murugappan, Mr. T L Palani Kumar, Mr. Sujjain S Talwar, Mrs. Bharati Rao, Mr. Aroon Raman, Mr. P S Raghavan
Standing L-R: Mr. Rajesh Khanna, Mr. N Ananthaseshan, Mr. M Muthiah, Mr. P S Jayan, Mr. K Srinivasan, Mr. C N Jagannathan

M M Murugappan, 63 years

Mr. Murugappan holds a Master's degree in Chemical Engineering from the University of Michigan, USA. Besides serving as the Chairman of Coromandel International Limited, Tube Investments of India Limited, Cholamandalam Investment and Finance Company Limited and Cholamandalam Financial Holdings Limited (formerly known as TI Financial Holdings Limited), he is on the Boards of several companies including Mahindra & Mahindra, IIT Madras Research Park and Cyient. He was elected as a fellow of the Indian Ceramic Society and is also a member of the American Institute of Chemical Engineers, Indian Institute of Chemical Engineers, Plastics & Rubber Institute. He is also a member of the Board of Governors, IIT Madras and is the Executive Chairman of the Murugappa Corporate Advisory Board.

T L Palani Kumar, 69 years

Mr. Palani Kumar is a Graduate in Chemical Engineering from the Indian Institute of Technology, Madras and a Post Graduate (Diploma) in Business Administration from the Indian Institute of Management, Ahmedabad. He has served as the Chief Executive Officer of Escorts Tractors Limited & New Holland Tractors Private Limited and as the Managing Director of Bharat Aluminium Company Limited. He is also on the Boards of Fostiima Integrated Learning Resources Private Limited and SBI Capital Markets Limited.

Sanjay Jayavarthanavelu, 50 years

Mr. Sanjay Jayavarthanavelu holds a Master's degree in Business Administration from Philadelphia University, USA. Currently, he is serving as the Chairman and Managing Director of Lakshmi Machine Works and as the Chairman of Super Sales, Lakshmi Life Sciences and Chakradhara Aerospace and Cargo Private Limited. He is also on the Boards of several companies viz., The Lakshmi Mills Company, Lakshmi Technology and Engineering Industries, etc.

Aroon Raman, 59 years

Mr. Aroon Raman holds a Master's degree in Economics from Jawaharlal Nehru University, New Delhi and a MBA from Wharton School, USA. He was the Managing Director of Raman Boards and then Raman Fibre Science Private Limited. He has served as Chairman of Confederation of Indian Industry, Karnataka. Besides being the Managing Director of Telos Investments & Technologies Private Limited he is also on the Boards of various companies including Wheels India, Brigade Enterprises, TVS Automobile Solutions and EduTech NTTF Private Limited.

Bharati Rao, 70 years

Mrs. Bharati Rao holds a Master's degree in Economics and is a Certified Associate of the Indian Institute of Bankers. She brings in over three-decades of rich experience in Banking and Finance. Having joined State Bank of India in the year 1972, she rose to become its Deputy Managing Director, holding concurrent charge of few of its associate banks and non-banking subsidiaries besides being an Advisor for mergers and acquisitions. She is also on the Boards of Tata Teleservices, Cholamandalam Investment and Finance Company, SBI capital Markets, Can Fin Homes etc.

M A M Arunachalam, 51 years

Mr. M A M Arunachalam, also known as Arun Murugappan is a MBA graduate from the University of Chicago. He is the Managing Director of Parry Enterprises India Limited. A fourth generation member of the Murugappa family, he drives the business development and strategic initiatives for the Company by identifying opportunities for its divisions - General Marketing Division (GMD), Parry Travels and Tuflex India. He is also on the Board of Coromandel Engineering Company Limited.

P S Raghavan, 63 years

Mr. Raghavan holds a Bachelor's degree in Physics from St. Stephen's College, Delhi as well as in Electronics & Communications Engineering from the Indian Institute of Science, Bangalore. Being in the Indian Foreign Service since 1979, he has held various diplomatic assignments in Moscow, Warsaw (Poland), London (UK), Ho Chi Minh City (Vietnam) and Pretoria (South Africa). He has been the Joint Secretary in the Prime Minister's Office dealing with Foreign Affairs, Nuclear Energy, Space, Defence and National Security; Secretary in the Ministry of External Affairs and the Indian Ambassador to countries like Russia, Ireland and Czech Republic etc. He is presently, the Convenor of National Security Advisory Board of India of the National Security Council Secretariat of the Government of India.

Sujjain S Talwar, 55 years

Mr. Sujjain Talwar is a qualified solicitor in India and England & Wales with over 25 years of experience. He is the founding partner of Economics Law Practice, a law firm that has consistently been ranked as a top 10 law firm, with over 150 lawyers and offices in 6 cities. He has in the past worked with reputed law firms such as Crawford Bayley, Pinsent Masons etc. He has been named as a leading individual for his 'depth of knowledge' 'innovative approach' and 'timely deliverables' by the Legal 500.

K Srinivasan, 61 years

Mr. Srinivasan is a Graduate in Mechanical Engineering from REC, Surathkal, Karnataka. He earlier worked with Widia India, Philips India and Wendt India Limited. He has been associated with the Company since 1999 and was part of the team that set up the first overseas operations in Australia. He has been serving as a Board Member of the Company since 2005 and is currently the Chairman of Murugappa Morgan Thermal Ceramics Limited. He is on the Boards of Wendt India, Sterling Abrasives and Volzhsky Abrasive Works etc.

N Ananthaseshan, 56 years

Mr. N Ananthaseshan holds a M.Tech degree in Material Sciences from the Indian Institute of Technology, Kharagpur and a Master's degree in Applied Sciences. He has been associated with the Company since 1986 and has over 30 years of experience in Electrominerals & Abrasives. He has been heading the Company's Abrasives division since 2014 prior to which he was heading the Electrominerals division of the Company. He is also a Director on the Boards of Sterling Abrasives Limited and Volzhsky Abrasive Works.

Dear Shareholders,

The growth momentum in CUMI continued during the FY 2018-19 driven by improved performance across all its business segments despite the challenging economic conditions. Though starting on an upbeat note in 2018, the global economic growth lost momentum primarily owing to implementation of tariffs by major economies and counter retaliatory measures. This coupled with heightened uncertainty resulting from financial market volatility and economic policy ambiguity tapered the growth momentum. India emerged as one of the fastest growing economies in the world, a bright spot in a grim forecast for the world economy.

CUMI, its subsidiaries and joint venture companies continued their good run with consolidated revenues increasing by thirteen per cent over the previous year. Strong demand across user industries, continuing inflation of metal prices, introduction of new & innovative products and an efficient distribution network contributed to the revenue growth. Operational efficiencies through Total Productive Maintenance (TPM) practices across its several plants and effective cost management resulted in increase in overall profitability. The Company continues to remain debt-free owing to prudent working capital management and well executed capital expenditure programmes. These programmes were on the lines of capacity increases as well as maintenance which were met entirely from internal accruals.

Considering the future projects and cash flow position, the Board has prudently considered an enhanced dividend of ₹2.75 per share for the year of which ₹1.50 per share has already been paid as interim dividend during the year.

Abrasives

Abrasives, CUMI's largest segment in the business of engineering surfaces recorded a eight per cent growth during the year backed by a very steady growth in the standalone business. The growth also came from new markets and products aided by a robust distribution network. The business continued to face challenges from slow-down in the economy especially during the second half of the year. The indigenous sourcing of input materials and better efficiencies through TPM practices improved the operational efficiency despite a significant increase in the cost of materials and fuel. The Russian subsidiary, Volzskhy Abrasive Works continued its growth trajectory riding on newer products, expanded territories and improved product mix. Sterling Abrasives, the Indian subsidiary manufacturing specialist conventional Abrasives also did well. Wendt India, the joint venture company which addresses the Super Abrasives, Grinding machines & Precision components market delivered improved performance in terms of both revenue and profitability on the back of enhanced exports.

> "Research and development continues to be a significant driving force in CUMI's growth trajectory and is vouched by the continuing increase in IPR creations."

The Bonded abrasives business of CUMI America improved leading to a decrease in its loss levels compared to the previous year. While the topline performance of CUMI Abrasives and Ceramics Company, China remained stable, the profitability dipped mainly attributed by sale of its aged inventories and the necessity to move to a new location. During the year, we have commenced setting up an additional Coated Abrasives maker facility in Sriperumbudur, India to address the growing market and demand. This state of the art facility will be equipped with IOT enabled process monitoring and other advanced features.

Ceramics

The Ceramics business marked the year with a significant increase registering a nineteen per cent growth over the previous year. The Metallized Cylinders and Wear Ceramics business continued to grow by focused marketing efforts, new markets and global customers. Our participation in global expositions like Ceramitec, Powergen, etc. was very well received. The state of the art manufacturing facility of Industrial Ceramics aided in the division receiving the coveted Gold rating for manufacturing excellence from Frost & Sullivan. Successful commissioning of a pilot plant for tape casting and sputtering for manufacture of substrates and sensors saw the division foraying into space and electronics.

CUMI Australia, the subsidiary engaged in lined equipment business continued to perform well and with better performance by CUMI America, the overall consolidated performance was enhanced substantially. Refractories and composites part of the business delivered a superior performance with a twenty five per cent growth over the last year driven by commodity upcycle and capacity expansion of user industries. The performance of the Company's joint venture Murugappa Morgan Thermal Ceramics engaged in manufacture of Ceramic Fiber products also improved owing to good growth in volumes.

Electrominerals

The Electrominerals business of CUMI continued to grow despite adverse business conditions registering a fifteen per cent growth in revenues. Value creation through grain treatments, product and process innovations, joint development projects continue to be the division's strengths. This year the power plant operations had to be discontinued for nearly 3 month period owing to severe flooding resulting from rains in Kerala which consequentially led to increase in input cost for the business. Though the Russian subsidiary, Volzhsky Abrasives ran at near full capacity, the profitability remained static due to adverse impact of foreign exchange fluctuation as well as increase in energy prices. Despite higher revenues in Fused Zirconia in South Africa, higher fixed costs and inability to pass on the entire cost-push to the market impacted the profitability. The Board of Foskor Zirconia Pty Limited is reviewing the business and will initiate suitable measures in due course.

Other businesses

Southern Energy Development Corporation Limited, the gas based power generation subsidiary which recorded a substantial increase in performance in the beginning of the year was severely impacted by disruption in its operations due to Gaja Cyclone resulting in drop in overall revenues for the year and consequential dip in profitability. While Net Access, the subsidiary providing IT facilities management and allied services recorded a double digit growth in turnover, the profitability continued to be flat owing to competitive market conditions and delays in project assignments.

Research and Development

Research and development continues to be a significant driving force in CUMI's growth trajectory and is vouched by the continuing increase in IPR creations. Over 50 IPRs were created and the seven Centers of

Excellence recognized by the Department of Scientific and Industrial Research, Government of India continue to support the technology initiatives across the organisation. CUMind - a customized innovation framework based on design thinking methodology launched during the year indicates the level of importance we attribute to nurturing this talent across the organization. During the year, a customized innovation hub was inaugurated in Sriperumbudur to provide a physical space for creative minds to unleash their ideas. Dedicated workshops, training sessions and an innovation friendly environment across CUMI has led to development of several breakthrough products, processes and solutions.

Human Resources

People continue to be the core strength of any organization and the most valuable resource. CUMI continues its focus on training and development not only across the organization but also across geographies to enhance every individual's capability in ushering the carbon age. The various teams across countries have been ably led by Mr. K Srinivasan. They have done well not only in facing challenges with great commitment, conviction and courage but also gearing up to take on the future. The devastation caused by the natural calamities in Tamilnadu and Kerala in the form of cyclone and floods brought out the best in our people. The CUMI teams in the respective locations, not only ensured minimal disruption to the operations and rebounded quickly but also actively & selflessly volunteered in the rescue and rehabilitation efforts in helping neighbouring communities adversely impacted by these calamities return to normalcy.

The CUMI Centre for Skill development (CCSD), the CSR initiative of CUMI addressing the training and development requirements of rural and underprivileged youth and honing their skills for future employment expanded its horizon to Ranipet, Tamilnadu. The year also witnessed the graduation of over 100 students who not only aced the training but also won in various regional and national level skill competitions.

Safety at the workplace remains top priority with focused and highest attention from the Board. Periodic training and awareness sessions continue to be conducted for identification and elimination of unsafe working conditions.

CUMI continued to be the proud recipient of several prestigious and coveted awards/ recognitions. CUMI's non-woven product received the prestigious Golden Peacock award for innovative product during the year and the Company's commitment to transparent detailed disclosures in its annual report was recognized by conferment of the Silver shield in manufacturing category by the Institute of Chartered Accountants of India.

Leadership

After serving the Company passionately for thirty five years and fourteen years at the helm as Managing Director, Mr. K Srinivasan will retire from the Company on 22nd November 2019 upon reaching the age of superannuation. Under Mr. Srinivasan's dynamic leadership the Company was transformed into a reputed and respected global player in Electrominerals, Abrasives and Ceramics. His vision, knowledge and perspective has helped the Company grow profitably and he has also nurtured future leadership across various divisions of the Company. We thank him for his outstanding contribution to the Company, wish him well during the rest of his tenure, his retirement and future endeavours. We deeply appreciate his contribution and are indeed immensely grateful.

The Board has selected Mr. Ananthaseshan, President Abrasives Division to succeed Mr. Srinivasan as Managing Director. Mr. Ananthaseshan has been inducted as an Executive Director in April 2019 to ensure a seamless transition during the course of this year. Mr. Ananthaseshan who commenced his career with CUMI has worked across several business verticals and we are extremely proud to see him taking over the mantle from Mr. Srinivasan. Further, Mr. M Muthiah after having served the Company for over 15 years retired as the Head of Human resources division. We wish him well in his retirement. Mr. Rajkumar Arul has taken over the helm of affairs of this division from Mr. Muthiah. We wish Mr. Ananthaseshan and Mr. Rajkumar all success in their new roles.

CUMI's Board of Directors continue to be a source of great inspiration and wise counsel to me. Their involvement in guiding, supporting as well as challenging the team has been most commendable. The Board deliberations have always been a good mix of encouragement, challenge and caution ensuring sound governance and adherence to our core values & beliefs. I am thankful to them for being generous with their time and wisdom.

We thank all our stakeholders be it customers, suppliers, vendors, bankers, authorities and of course you - the shareholders for your unstinted support and encouragement in our journey in "Making Materials Matter". As we now transition from an information age to an imagination age - The Carbon Age.

I look forward to working with each of you in this exciting new phase of growth and progress.

With warm regards,

M M Murugappan
Chairman

Corporate Information

BOARD AND COMMITTEES

The Board of Directors

M M Murugappan, Chairman (DIN 00170478)

T L Palani Kumar (DIN 00177014)

Sanjay Jayavarthanavelu (DIN 00004505)

Aroon Raman (DIN 00201205)

Bharati Rao (DIN 01892516)

M A M Arunachalam (DIN 00202958)

P S Raghavan (DIN 07812320)

Sujjain S Talwar (DIN 01756539)

K Srinivasan, Managing Director (DIN 00088424)

N Ananthaseshan, Managing Director - Designate (DIN 02402921)

Committees of the Board

Audit Committee

T L Palani Kumar, Chairman

Sanjay Jayavarthanavelu

Bharati Rao

Sujjain S Talwar

Nomination and Remuneration Committee

T L Palani Kumar, Chairman

Aroon Raman

Sanjay Jayavarthanavelu

Corporate Social Responsibility Committee

Aroon Raman, Chairman

P S Raghavan

K Srinivasan

Risk Management Committee

P S Raghavan, Chairman

Aroon Raman

K Srinivasan

Stakeholders Relationship Committee

M M Murugappan, Chairman

P S Raghavan

M A M Arunachalam

K Srinivasan

MANAGEMENT COMMITTEE

K Srinivasan, Managing Director

N Ananthaseshan, Managing Director - Designate & Head - Abrasives

Rajesh Khanna, Mentor & Advisor - Ceramics

P S Jayan, Executive Vice President - Electrominerals

Jagannathan Chakravarthi Narasimhan - Chief Financial Officer

COMPANY SECRETARY

Rekha Surendhiran

Carborundum Universal Limited

Parry House, 43, Moore Street,

Chennai 600 001

Tel: +91-44-30006141; Fax: +91-44-30006149

E-mail: rekhas@cumi.murugappa.com

STATUTORY AUDITORS

Price Waterhouse Chartered Accountants LLP

BANKERS

State Bank of India

Standard Chartered Bank

Bank of America

The Hongkong and Shanghai Banking Corporation Ltd.

BNP Paribas

REGISTRAR AND SHARE TRANSFER AGENT

Karvy Fintech Private Limited

Unit: Carborundum Universal Limited

Karvy Selenium Tower B, Plot 31-32,

Financial District, Serilingampally Mandal,

Nanakramguda, Hyderabad - 500 032.

Tel: +91-40-67162222, Fax: +91-40-23420814

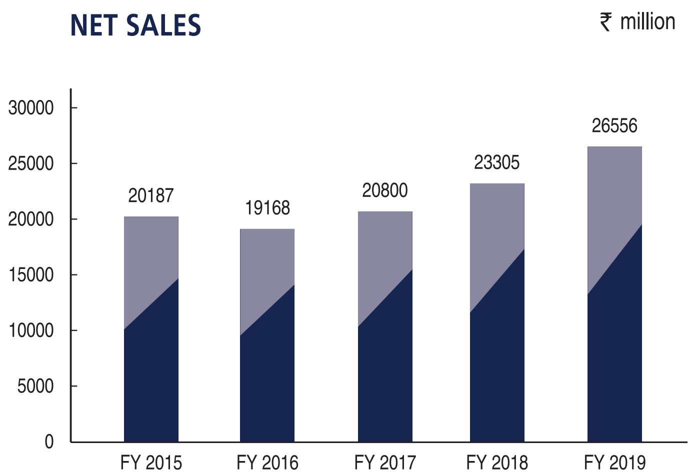
Toll Free no.: 1800-345-4001

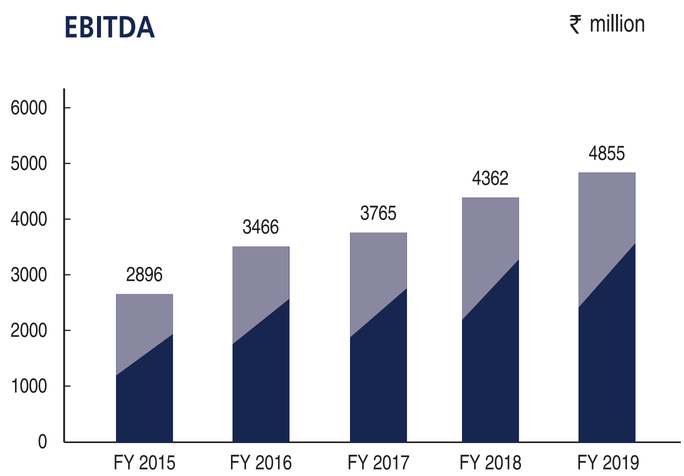
E-mail: einward.ris@karvy.com;

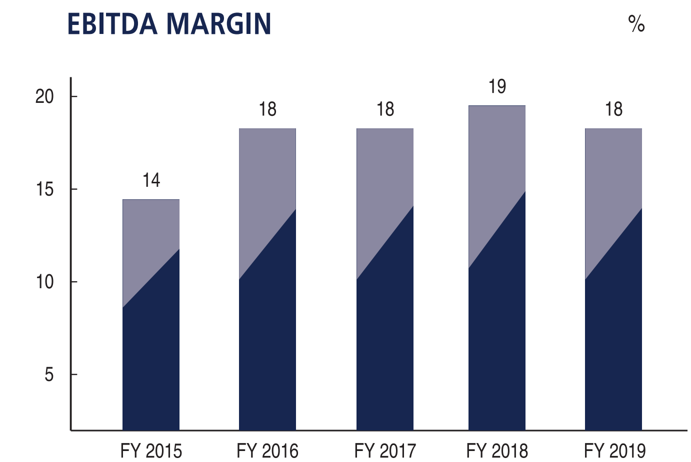
website: www.karvy.com

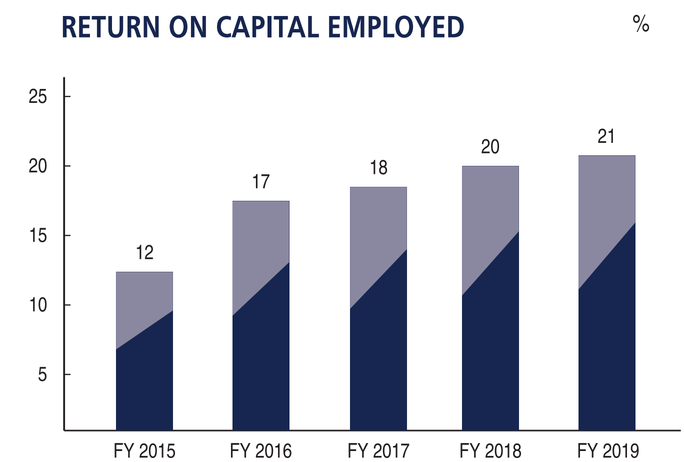
Contact Person: Mrs. Varalakshmi P - Asst. General Manager

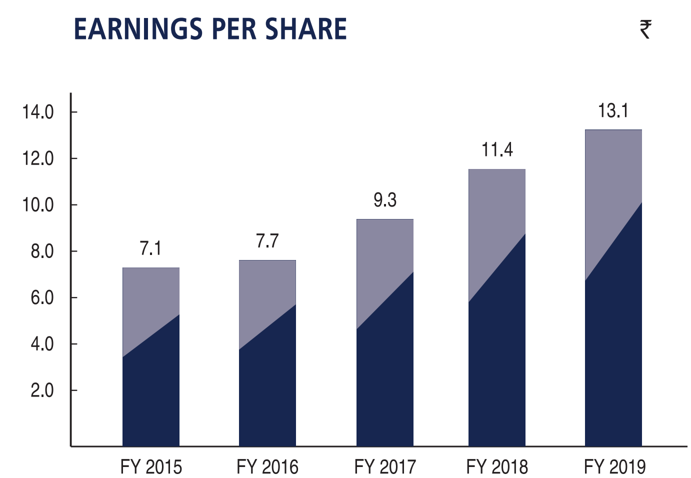
Financial Highlights

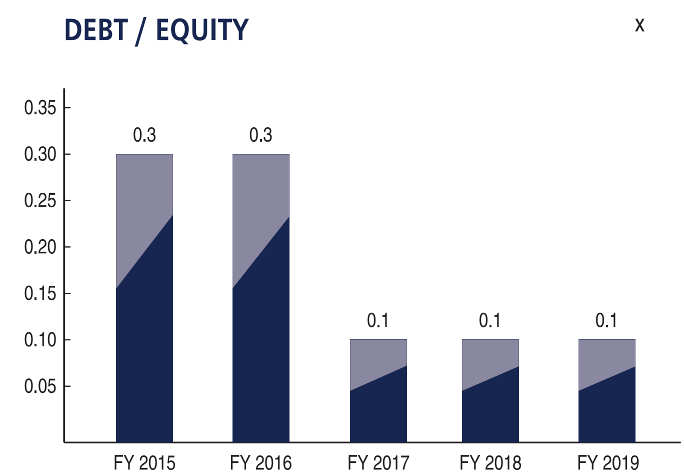












Financial Highlights

₹ million

Summary information	Consolidated performance					Standalone performance				
	2019#	2018#	2017#	2016#	2015	2019#	2018#	2017#	2016#	2015
Net Sales	26556	23305	20800	19168	20187	17519	15514	13828	12735	11518
EBITDA *	4855	4362	3765	3466	2896	3242	2805	2464	2385	1800
PBIT *	3773	3302	2800	2598	1892	2488	2067	1795	1764	1212
PBT	3688	3216	2619	2369	2204	2479	2052	1707	1675	1994
PAT	2477	2156	1749	1441	1326	1661	1435	1218	1164	1483
Net Fixed Assets	6191	6508	6626	6222	7204	4178	4474	4595	4435	4070
Net Working Capital	8944	7366	5578	4143	3790	6027	4709	3487	2888	2939
Non Current Investments	1304	1232	1195	1293	78	2511	2569	2541	2561	2375
Shareholders Networth	17241	15643	13828	11923	10887	12769	11697	10550	9584	8599
Loan Funds	967	1294	1559	3199	3402	9	18	26	1091	835
Ratio Analysis										
Performance Ratios										
EBITDA / Net Sales %	18%	19%	18%	18%	14%	19%	18%	18%	19%	16%
PBIT / Net Sales %	14%	14%	13%	14%	9%	14%	13%	13%	14%	11%
Asset Turnover times	1.4	1.3	1.2	1.1	1.1	1.5	1.4	1.3	1.3	1.3
Return on Capital Employed %	21%	20%	18%	17%	12%	20%	19%	17%	17%	13%
Return on Equity	15%	15%	14%	13%	12%	14%	13%	12%	13%	19%
International Revenue (net) share %	45%	45%	45%	44%	46%	22%	23%	23%	21%	20%
Leverage Ratios										
Interest Cover times	57.2	50.7	20.8	15.1	11.4	345.7	191.2	28.1	26.8	20.7
Debt Equity Ratio	0.1	0.1	0.1	0.3	0.3	0.0	0.0	0.0	0.1	0.1
Debt / Total Assets	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.1	0.1
Liquidity Ratio										
Current Ratio	3.2	2.8	2.4	1.8	1.7	3.7	3.0	2.7	2.2	2.6
Activity Ratio										
Inventory Turnover days	67	65	66	71	74	62	57	60	62	63
Receivable Turnover days	68	67	66	68	71	68	69	67	68	71
Creditors No. of days	37	38	38	41	49	46	50	47	43	43
Cash Cycle days	98	94	94	98	96	84	76	80	87	91
Investor related Ratios										
Earnings Per Share (₹)	13.1	11.4	9.3	7.7	7.1	8.8	7.6	6.5	6.2	7.9
Dividend Per Share (₹)	NA	NA	NA	NA	NA	2.75	2.25	1.75	1.50	1.25
- Interim	NA	NA	NA	NA	NA	1.50	1.00	1.00	1.50	0.75
- Final (proposed and paid in subsequent year)	NA	NA	NA	NA	NA	1.25	1.25	0.75	-	0.50
Dividend Payout %	NA	NA	NA	NA	NA	35.7%	33.5%	29.6%	26.0%	16.0%
Price to Earnings Ratio	27.5	30.2	27.0	22.8	25.4					
Enterprise Value / EBITDA	14.0	14.9	12.8	10.3	12.6	NA	NA	NA	NA	NA
Enterprise Value / Net Sales	2.6	2.8	2.3	1.9	1.8	NA	NA	NA	NA	NA

* excluding exceptional income/expenses (Net)

The figures mentioned herein above for the years ended 31st March 2019, 31st March 2018, 31st March 2017 and 31st March 2016 are based on Indian Accounting Standards (Ind AS), hence not comparable with year ended 31st March 2015 figures prepared under previous GAAP.

Refer page 200 for Glossary.

Directors' Report

Your Directors have the pleasure in presenting the 65th Annual Report together with the Audited Financial Statements for the year ended 31st March 2019. The Management Discussion & Analysis Report which is required to be furnished as per SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (hereinafter referred to as the Listing Regulations) has been included in the Directors' Report so as to avoid duplication and overlap.

ECONOMIC OVERVIEW & COMPANY PERFORMANCE

Economic Overview

According to International Monetary Fund (IMF), after a strong growth in 2017 and early 2018, the global economic activity slowed notably in the second half of the year 2018 owing to a confluence of factors affecting major economies. Global growth in 2018 was 3.6 per cent as against the earlier projected growth of 3.9 per cent, despite moderate performance in some major economic countries notably in Europe and Asia. The downward revision is a reflection of suppressed activity in early 2018 in few major advanced economies, effects of trade measures introduced, tighter financial conditions, geopolitical tensions and higher oil import bills. China's GDP growth slowed to 6.5 per cent year-on-year in the third quarter from 6.8 per cent in the first half of 2018, mainly due to weaker trade and investment. The trade sanctions imposed by US may bring in further challenges to China's economy. Growth in China is projected to be moderate at 6.5 per cent in 2018-19 and 6.2 per cent in 2019-20, according to the World Bank's new China economic update. In Latin America, growth is projected to recover over the next two years, from 1.1 per cent in 2018 to 2.0 per cent in 2019 and 2.5 per cent in 2020.

Global growth is now projected to slow from 3.6 per cent in 2018 to 3.3 per cent in 2019, before returning to 3.6 per cent in 2020. The reasons for the revision being the tariff increase enacted in US and China, new automobile fuel emission standard in Germany and sovereign financial risk concern in Italy.

Despite the slowdown in the global economy, India has emerged as one of the fastest growing economies in the world. As per World Bank's report, India's GDP growth is estimated to grow at the rate of 7.3 per cent for fiscal year 2018-19 as against 6.7 per cent in the year 2017-18. This is because the economic activity continues to recover with strong domestic demand. Investment continues to strengthen amidst the GST harmonisation and rebound of credit growth.

Indian economy is poised to pickup in 2019 benefitting from lower oil prices and slower pace of monetary tightening than that previously expected, as inflation pressure eases. The gaining momentum is attributable to evolving the Goods and Services Tax regime and the country opening up more to foreign investors. Numerous foreign companies are setting up their facilities in India on account of various government initiatives aiding the growth of foreign investments.

India can benefit by improving its integration with global markets. Enhancing foreign investments in various sectors through the automatic route and a meaningful reduction in bureaucratic oversight greatly increases access for foreign investors to the Indian market.

During the fourth quarter of the financial year 2019, there were liquidity constraints leading to slowdown in economy and market demand. This slowdown is expected to recover during the course of financial year 2020. The GDP growth in Indian economy is now estimated to grow at 7.3 per cent in 2020 and 7.5 per cent in 2021 as per latest IMF forecast.

Company Performance

Revenues

During the year, the standalone revenues grew by 11 per cent and the consolidated revenues by 13 per cent driven by better performance across all the businesses.

The following table summarises the standalone and consolidated revenues - both segment and geography wise:

₹ million

	2018-19		2017-18		Growth
	% share	Amount	% share	Amount	%
Standalone					
Abrasives	53	9209	55	8636	7
Ceramics	28	4985	26	4056	23
Electrominerals	26	4534	26	4107	10
Eliminations	(7)	(1209)	(6)	(1025)	(18)
Total	**100**	**17519**	**100**	**15774**	**11**
India	78	13657	77	12201	12
Rest of the world	22	3862	23	3573	8
Total	**100**	**17519**	**100**	**15774**	**11**
Consolidated					
Abrasives	42	11243	44	10363	8
Ceramics	23	6044	21	5068	19
Electrominerals	38	10186	38	8887	15
Power	1	187	1	239	(22)
IT Services	2	451	2	401	12
Eliminations	(6)	(1555)	(6)	(1379)	(13)
Total	**100**	**26556**	**100**	**23579**	**13**
India	55	14534	55	13048	11
Rest of the world	45	12022	45	10531	14
Total	**100**	**26556**	**100**	**23579**	**13**

Strong demand across user industries, continued inflation of metal & commodity prices, introduction of new products, efficient distribution, quality products and focus on newer markets resulted in a better top line growth.

The Company's consolidated revenues from India increased by 11 per cent and from rest of the world increased by 14 per cent. At a consolidated level, Abrasives sales grew by 8 per cent, Ceramics sales grew by 19 per cent and Electrominerals sales grew by 15 per cent.

Directors' Report

Manufacturing

The manufacturing team played a vital role in focussed production planning and order execution to create a faster growth momentum. The plants in India operated at about 75 per cent capacity utilisation levels. The product segments Coated Abrasives, Metalized Cylinders, Brown Fused Alumina, White Fused Grains, Industrial Ceramics and Fired Refractories continued to run at full capacity. Continued focus on Total Productive Maintenance (TPM) helped the Company to improve the quality of its products, operate the plant efficiently reducing the overall cost of operations. During the year, the Company's facility at Hosur has been awarded the Gold Certification in Manufacturing Excellence by Frost & Sullivan.

Capital expenditure during the year, across all geographies was majorly in the nature of quality enhancement, line balancing and general infrastructure.

Earnings & Profitability

The Company's standalone financial results are summarised in the table below:

₹ million

	As a % of Gross Sales	2018-19	As a % of Gross Sales	2017-18	Increase %
Gross Sales		**17519**		**15774**	
Other Operating Income		303		249	
Revenue from Operations		**17822**		**16023**	
Other Income		269		310	
Total Income		**18091**		**16333**	
Expenses					
Cost of material Consumed	40	6990	37	5796	21
Purchase of stock in trade	5	795	4	709	12
Movement of Inventory	(2)	(265)	1	138	(292)
Excise Duty on sale of goods	-	-	2	260	(100)
Employee benefits expense	10	1821	11	1742	5
Finance Cost	0	9	0	15	(40)
Depreciation and amortisation	4	754	5	739	2
Other expenses	31	5508	31	4882	13
Total Expenses	**89**	**15612**	**91**	**14281**	**9**
Profit before tax	**14**	**2479**	**13**	**2052**	**21**
Profit after tax	**9**	**1661**	**9**	**1435**	**16**
Total Comprehensive Income	**9**	**1628**	**9**	**1465**	**11**

Aided by the growth in revenues, standalone profit before tax improved to ₹2479 million from ₹2052 million in the previous year.

The Company uses a variety of raw materials for its products - Bonds, Yarn, Grains, Calcined Alumina, Tabular Alumina, Mullite, Pet Coke, Bauxite, Zircon Sand amongst others. The sourcing is a prudent mix of indigenous and imported materials. Aided by judicious sourcing and optimising throughput in production, material consumption marginally improved during the year.

Other expenses increased from ₹4882 million in the preceding year to ₹5508 million in the current year owing to volume growth, cost increases and investments in preparing the organisation for the expansion programmes being undertaken.

Power and fuel cost also increased during the current year. Captive power generation from the Company's Hydel power unit in Maniyar continued to be lower this year due to the heavy floods in Kerala. The power consumption was also higher in line with the higher volumes produced compared to the previous year.

Employee benefits expense increased by 5 per cent during the year, which is a combination of both increase in head count and salary. The overall employee cost was at 10 per cent of the revenues.

Profit before interest and tax margin expanded at all divisions on account of higher sales and better operating leverage.

Finance costs were at ₹9 million compared to ₹15 million in the previous year. Profit after tax of ₹1661 million was higher compared to that of the previous year ₹1435 million. Total Comprehensive Income increased from ₹1465 million to ₹1628 million.

The consolidated profit before tax (before share of profit from associate and joint ventures) entity-wise is represented below:

₹ million

	2018-19	2017-18
CUMI Standalone	2479	2052
Subsidiaries including step down subsidiaries:		
Indian		
Net Access India Limited	35	37
Southern Energy Development Corporation Limited	24	71
Sterling Abrasives Limited	133	134
Foreign		
CUMI (Australia) Pty Limited	166	152
CUMI International Limited	313	284
Volzhsky Abrasives Works	1152	1187
Foskor Zirconia Pty Limited	(212)	(162)
CUMI America Inc.	(24)	(33)
CUMI Middle East FZE	0	8
CUMI Abrasives & Ceramics Company Limited	(17)	(9)
Thukela Refractories Isithebe Pty Limited	-	(0)
CUMI Europe s.r.o.	(1)	(8)
Total of Subsidiaries	**1569**	**1661**
Inter Company Eliminations	(560)	(643)
Consolidated Profit before tax	**3488**	**3070**
Consolidated Profit after tax attributable to owners	**2477**	**2156**

On a consolidated basis, the profit before tax (before share of profit from associate and joint ventures) increased from ₹3070 million to ₹3488 million. Profit after tax and non-controlling interests was ₹2477 million (previous year ₹2156 million).

The performance of the subsidiaries is detailed separately in this Report. Segmental profitability improved across all segments owing to higher volume, selective price increase mitigating the cost push and efficient cost management.

Financial Position

An overview of the Company's financial position - on a standalone and consolidated basis is given below:

₹ million

Financial position	Standalone			Consolidated		
	31.03.2019	31.03.2018	% change	31.03.2019	31.03.2018	% change
Net Fixed assets (including goodwill)	4178	4474	(7)	7414	7659	(3)
Investments - Non current	2511	2569	(2)	1304	1232	6
Other assets:						
- Inventories	3390	2604	30	5329	4380	22
- Trade receivables	3305	3267	1	5139	4751	8
- Cash and cash equivalents	1092	740	48	1921	1847	4
- Other assets	782	705	11	1213	1116	9
Total assets	**15258**	**14359**	**6**	**22320**	**20985**	**6**
Liabilities (Other than loans)	2480	2644	(6)	3588	3432	5
Net assets	**12778**	**11715**	**9**	**18732**	**17553**	**7**
Sources of funding:						
Total equity attributable to owner	12769	11697	9	17241	15644	10
Non - Controlling interest				523	615	(15)
Loan & outstanding:						
- Long term borrowings	3	11	(75)	51	66	(23)
- Payable within one year	6	7	(14)	49	46	7
- Short term borrowings	-	-	-	868	1182	(27)
Total loans	9	18	(50)	968	1294	(25)
	12778	**11715**	**9**	**18732**	**17553**	**7**
Loans (net of cash and cash equivalents)	**(1083)**	**(722)**	**50**	**(953)**	**(553)**	**72**

Directors' Report

On a consolidated basis, the total equity attributable to owners as on 31st March 2019 was ₹17241 million. There was an increase (net of dividend) to the extent of ₹1597 million. Non-controlling interest was at ₹523 million.

Liabilities (other than loans) was ₹3588 million. The loans outstanding reduced from ₹1294 million to ₹968 million. Net fixed assets (including goodwill) decreased from ₹7659 million in the last year to ₹7414 million during the current year.

Cash Flow

The Company's cash flow generation is healthy. The following table summarises the Company's consolidated and standalone cash flows for the current and previous year:

₹ million

Cash flow	Standalone		Consolidated	
	2018-19	2017-18	2018-19	2017-18
Cash flow from Operations	2037	2001	3218	3238
Taxes paid	(820)	(685)	(1200)	(1109)
Cash flow from operating activities	**1217**	**1316**	**2018**	**2129**
Capital Expenditure (Net of disposal)	(511)	(577)	(949)	(920)
Cash flow from other investing activities	236	290	150	172
Cash flow from investing activities	**(275)**	**(287)**	**(799)**	**(748)**
Cash flow from financing activities	**(590)**	**(356)**	**(1091)**	**(832)**
Net increase/(Decrease) in Cash & Cash equivalents	352	673	128	549
Net Cash and Cash equivalents at the beginning of the year	**740**	**67**	**1847**	**1298**
Effect of exchange rate changes on the balances of cash and cash equivalents held in foreign currencies	-	-	(54)	0
Cash and Cash equivalents at the end of the year	**1092**	**740**	**1921**	**1847**

On a standalone basis, net cash generation from operations was ₹1217 million in FY 2018-19 compared to previous year's ₹1316 million. Net cash outflow on account of investing activities was ₹275 million majorly towards addition of property, plant and equipment. Net cash outflow on account of financing activities was ₹590 million which is attributable primarily to repayment of borrowings and dividends paid. The net increase in cash and cash equivalents was ₹352 million against ₹673 million in FY 2017-18.

On a consolidated basis, net cash generation from operations was ₹2018 million in FY 2018-19. Net cash outflow on account of investing activities was ₹799 million. Net cash outflow on account of financing activities was ₹1091 million which is attributable primarily to repayment of borrowings and dividends paid. The net increase in cash and cash equivalents was ₹128 million against ₹549 million in FY 2017-18.

Key Financial Ratios (on a standalone basis)

₹ million

Parameter	2018-19	2017-18	Favourable/(Adverse)
Return on Capital Employed (%)	20.32%	18.54%	9.6%
Debt Equity (times)	0.001	0.002	50.0%
PBT % to Sales	14.15%	13.23%	7.0%
Asset turnover (times)	1.52	1.43	6.3%
Receivable turnover (days)	68	69	1.4%
Inventory Turnover (days)	62	57	(8.8%)
Interest Coverage Ratio (times)	345.7	191.2	80.8%
Current Ratio (times)	3.72	3.02	23.2%
Operating Profit Margin (%) - PBIT Margin (%)	14.20%	13.32%	6.6%
Net Profit Margin (%)	9.48%	9.25%	2.5%
Return on Net Worth (%)	13.58%	12.90%	5.3%

The change in Debt Equity ratio and Interest Coverage ratio is on account of repayment of loans by the Company as per schedule and consequential reduction in the interest. There were no other significant changes (i.e. change of 25% or more) in the key financial ratios during the year. The change in Return on Net Worth is on account of increased profits during the year.

Directors' Report

SHARE CAPITAL

The paid up equity share capital as on 31st March 2019 was ₹189.15 million. The capital increased during the year by ₹0.19 million, consequent to allotment of shares upon exercise of Stock Options by employees under the Company's Employee Stock Option Scheme 2007 and Employee Stock Option Plan 2016.

DIVIDEND

Considering the past dividend payout ratio and the current year's operating profit, the Board has considered it appropriate to recommend a final dividend of ₹1.25/- per equity share of ₹1/- each. It may be recalled that in February 2019, an interim dividend at the rate of ₹1.50/- per equity share of ₹1/- each was declared and paid. This aggregates to a total dividend of ₹2.75/- per equity share of ₹1/- each for the year, which is higher than the previous year. The Company's Dividend Policy is available at *https://www.cumi-murugappa.com/policies.html.* The dividend paid as well as being recommended for the year ended 31st March 2019 is in line with this policy.

TRANSFER TO RESERVES

An amount of ₹500 million has been transferred to the General Reserve of the Company as at 31st March 2019.

PERFORMANCE OF BUSINESS SEGMENTS

The business profile, market developments and current year performance are elaborated in the following sections:

Abrasives

Business Profile

This division is in the business of Engineering Surfaces. It manufactures and distributes rigid and flexible abrasives and adjacent products that are used in the generation of precision, functional or enduring surfaces. The key product segments are Bonded Abrasives, Coated Abrasives, Metal Working Fluid, Super Abrasives and allied products.

Rigid or Bonded Abrasives products grinds, cleans, scours, abrades or removes solid material by rubbing action or by impact. Bonded Abrasives are made using Glass Bonds (vitrified), Phenolic Resin Bonds. Coated Abrasives are basically hard synthetic minerals coated onto paper, fibre, cloth or film and finally formed into different shapes, sizes and types according to application needs. Abrasive materials and Abrasive products are utilised in several end user industries such as automobiles, auto ancillary, metalworking, wood working, railways, aerospace and general engineering.

This division has more than sixty years of experience in Abrasives manufacturing, application engineering and distribution. Strong Research & Development backed by application engineering and supported by third generation channel partners are the strengths of this division. Over the years, the division has built world class facilities with strong processes, which gives it a cutting edge.

The competitive advantage of the division comes from its raw materials sourced from the Electrominerals division and from the best suppliers across the world. These inputs are then formulated and the products are designed based on deep understanding of the end use applications. Cost competitiveness is the overarching strategy for the division while ensuring that the supply requirements are met in full.

The business has ten manufacturing plants located across India, Russia and Thailand. The marketing entities in North America, Middle East, China and distributors across the globe provide strong market reach in India and over 55 markets globally.

Industry Scenario

The global Abrasives market is segmented based on region. Asia Pacific represents the largest and the fastest growing market for the Abrasives industry and China is the largest producer of Abrasive materials and Abrasive products. The growing demand for various types of Abrasives from industries like Transportation, Building & Construction and other durable goods industries is expected to drive the Asia Pacific Abrasives market. United States, which holds the world's second largest national market for Abrasives, is expected to deliver good growth. Europe represents another high potential market built around Transportation, Steel and Bearing industries. The market is dominated by leading players operating across the globe.

The Indian Abrasives market is dominated by few leading local manufacturers serving customers across diverse industries. Imports are predominantly restricted to low end segments (where price is a key factor) along with few international brands present in high end precision applications. The Indian domestic market has been witnessing a shift from manual grinding applications to mechanised polishing processes, ushering in opportunities for new products in the Coated Abrasives segment. The Bonded Abrasives segment constitutes a key consumable for the Construction and Transportation industries, which has demonstrated high growth in the past decade due to rapid urbanisation and increase in disposable income.

The unorganised market constitutes about thirty per cent of overall market. The implementation of Goods and Services Tax has brought about a uniform regime for all players to compete in the market evenly. In the domestic Russian market, there are three major players. The Company is one of the major players in Vitrified Bonded Abrasives.

Sales Overview

The focus for the Abrasives business during the year, was to grow topline at better than the market growth rate, facilitated by greater penetration in existing markets and entering new markets. Accordingly, the Abrasives business on a standalone basis recorded a growth in revenues (excluding excise duty) from ₹8470 million to ₹9209 million. However, the business witnessed a drop in profitability on account of significant increase in the cost of key raw materials and fuel across the year.

The first half of the year saw the Abrasives business growing in double digits, in line with positive sentiments in the market, with key end user industries demonstrating favourable growth. The business could achieve planned levels of sales across most product groups and industries in the first half, supported by steady demand in the market. The second half of the year found the Abrasives division encountering challenging market conditions with a general slowdown of economic activities in the country. However, the business continued to be well supported by its dealer partners, who readily invested in the product segments and helped in secondary counter sales throughout the year.

The Coated business continued to register good growth in the conventional products in domestic market. The growth came about by way of launch of new products, focus on technical products, strong brand recall and dealers' confidence in this product segment as well as quality consistency of the products. The business has also responded to the growing market and demand by deciding to invest in a state-of-the-art Coated Abrasives manufacturing facility in Sriperumbudur, to complement the existing facility at the same site. The project is expected to help the Company maintain and further consolidate its market leadership in the domestic market, while strengthening its position in the international market.

The Bonded business realised significant gains over the course of the year, especially in the customised products segment. The business made inroads in emerging industrial clusters, engaging with SME customers and growing in multiple industry verticals. Sales was suitably assisted by continuous new product development and product establishment activities from the Technology department. In the Bonded Mass Market segment, business achieved significant growth in its traded portfolio.

Business has also made steady progress in building distribution leadership, a key strategic pillar for the Company's growth. During the year, the business aggressively appointed new channel partners and expanded its dealer network both in India and abroad. The business made a conscious effort in entering new and under-represented markets, with a special supply chain structure to service remote customers suitably. Retail development and industrial storming initiatives were conducted for better market penetration. New technical products were developed and introduced in the mass market after studying the needs of the customers.

The Abrasives sales in Russia realised higher growth this year on account of new products and deeper engagement with customers. Sterling Abrasives which primarily addresses agriculture related applications delivered a good growth during the year.

Manufacturing

Manufacturing provided an ideal support to the sales and marketing initiatives, surpassing benchmarks in capacity utilisation and consistency leading to better on time delivery and product performance.

The key strategy was to build a sustainable competitive advantage by developing and establishing a range of products, by leveraging the Company's access to superior electromineral grains from the Electrominerals division. As the markets witnessed an extremely volatile supply of raw materials, both in terms of delivery and price, the division benefitted greatly from the assurance of its internal sourcing of grains - the key raw material. Business continued to focus on introducing new products - moving from traditional Brown to Semi-friable to gain significant competitive advantage and offering superior Coated technical products with hi performance Zirconia and Ceramic grains. Conscious efforts were taken to increase indigenous sourcing and lowering the gap between exports & imports to de-risk and improve profitability.

In order to cater to increasing demand for coated products, business has invested in expansion of its Coated Abrasives manufacturing capacity by kick starting the establishment of an additional maker line in Sriperumbudur, as earlier stated. The project, which is scheduled to be completed in FY 2020, will be equipped with state-of-the-art IOT enabled process monitoring and improvement features.

The Company's adoption of TPM has transcended from an improvement tool to a working philosophy today, resulting in an immense competitive edge in the market. The TPM journey, which started in 2011, as an organisation-wide strategy to increase the effectiveness of production environment, has now evolved as a fundamental value creation practice, positively impacting customer experiences.

In the mass market thin wheel product category, the business introduced new high-performance products, developed through "Design Thinking Methodology", utilising the reorganised production capacities. During the year, the Bonded Precision Abrasives business was engaged in productivity improvement projects with customers with continued slew of new product launches.

The division has placed special focus on adopting elements of Industry 4.0 in its day to day operations, to leverage the gains of IOT and data analytics. Considering the changing landscape of manufacturing technologies, the division would continue its effort to build capabilities in newer fields and technologies.

In FY 2018 -19, the Abrasives business experienced significant cost push from escalating prices of key raw materials and fuel, due to several macro-economic trends. The business recorded standalone operating profits before interest and taxes at ₹1297 million from ₹1225 million last year. At a consolidated level, the profits grew from ₹1325 million last year to ₹1401 million this year. The business also ensured robust cash generation by focussing on better collections and inventory management.

Key Financial Summary

₹ million

Particulars	Standalone			Consolidated		
	2018-19	2017-18	Change (%)	2018-19	2017-18	Change (%)
Revenue (excluding excise duty)	9209	8470	9	11243	10184	10
Segment results (PBIT)	1297	1225	6	1401	1325	6
Capital employed	3441	3354	3	5182	5025	3
Share to total revenue of CUMI (%) (without eliminations)	53	55		42	44	
Share to segment results (PBIT) of CUMI (%)	52	59		39	42	

Directors' Report

Ceramics

Business Profile

Industrial Ceramics

The Ceramics business has three product groups viz., Industrial Ceramics, Super Refractories and Anti-corrosives.

Industrial Ceramics business offers Alumina, Zirconia and Silicon Carbide products of technical ceramic grades addressing Wear and Corrosion protection, Electrical insulation, Thermal protection and Ballistic protection applications. The key user industries for Ceramics business are Power Generation and Transmission, Coal washeries, Grain handling, Sanitary tiles and Sanitary ware, Ballistic protection, Cement, Non-ferrous metals, Iron and Steel industries, Carbon black, Insulators, Furnace building, Glass, Petrochemicals and Construction.

The operations are carried out through manufacturing/service facilities located in India, Australia and US. The subsidiaries in North America, Middle East and China also support this business in getting an extended customer reach.

The Industrial Ceramics business based out of India is largely a global business and majority of the sales volumes are through exports.

The Company is one of the major players in India, Australia and Europe and in specific product groups in Japan and China.

Super Refractories

Refractory is a material that retains its shape and chemical identity when subjected to high temperatures upto 2000 degrees Celsius and is used in applications that require extreme resistance to heat, such as furnace linings.

The Company is a market leader in complex shaped high temperature Application Refractories, Cements, and Monolithic castables (Refractory in powder form).

The key user industries for Refractory business are Iron & Steel, Secondary steel, Glass melting, Cement kilns, Carbon Black reactors, Rocket launch pads, Ceramic industry, Petrochemical industry, Thermal Power plants, Non-ferrous melting, Foundry, Heat Treatment furnaces etc.

Anti-corrosives (Prodorite)

Prodorite branded Anti-corrosive material is used at highly acidic or basic environment, at any pH range between 1 to 12. The Company is a major player in this industry, serving all kinds of Chemical industries and other industries involving effluent treatments. The Company's product ranges from Acid resistant wall, Brick, Carbon bricks, Tiles, Lining, Flooring, Screeding, Coating, Piping, Sealants, and Water proof construction chemicals. Also,the Company's Poly concrete cells are used in Copper and Zinc extraction across the world.

Composites

Composites are primarily Glass Fibre reinforced polymer products manufactured through Vacuum infusion, Pultrusion, Filament winding, Grating and hand lay-up methods. The product range includes large Chemical storage tanks, Chimneys, Flue gas desulphurisation (FGD) spray headers, Abrasion resistant Anti-corrosive pipes, Anti-corrosive Pipes and Pipe fittings, Windmill nacelle cover, Automotive and Railway parts, Gratings, Pallets, Cable trays, Flooring, Chequered plates, Roof sheets, Chimney ladders, Platforms, Bridges, Louvers, Fencing etc.

The operations are carried out through manufacturing/service facilities located in India (Ranipet, Serkadu & Jabalpur) and Russia.

Industry Scenario

In the Wear Ceramics space, there are six major players globally - the Company is one of the reputed players in the world. In the Engineering Ceramics, there are around five players globally with the Company being relatively smaller and steadily growing in size. The Company is the only manufacturer of Metallized Cylinder in India and caters to leading customers both in India and abroad.

In the Wear Ceramics industry structure in India, which is catered to by a few major players, newer application areas like dredging and dispersion of pigments in paints are opening up new opportunities for CUMI.

In Australia, the Company is one of the major players in the Lined Equipment and Mineral processing industry. While there are about a dozen players in the industry, the Company's products are superior in quality and consistency continuing to dominate and grow its presence.

Further, the Company is expanding into US and Japan becoming the preferred supplier of Wear Resistant products to some of the leading customers in these countries.

In the Engineered Ceramics sector, the Company supplies spark plug bodies to the Automobile sector and has developed Ceramic based oxygen sensors to cater to Bharath IV emission norms.

In the Metallized Cylinders segment, the new facility at Hosur is fully operational. With a total installed capacity of 1.7 million cylinders per annum, the Company is now the second largest producer of Metallized Cylinders in the world and is fully geared up to meet the increasing market demand globally.

With respect to Refractories, merger and acquisition of the distressed assets by major players in the Iron & Steel industry has boosted the sector in India. Major projects and upgrading to the latest technology have helped this business to gain significant orders. Automotive sector growth led to major demand in Carbon black industry which triggered capacity increase by all the Carbon black manufacturers. Few tyre manufacturers are investing in carbon black reactors as a backward integration. Agricultural sector growth has triggered fertiliser demand and capacity. Major OEMs have the Company's Refractories brand in their approved product list which has helped in growth of Refractories and Anti-corrosive product sales volume growth.

The Company's composite market is growing on account of varied factors encompassing new construction/revamping of existing sites of customers installed with Composite products to improve building, plant and machinery life cycle. The Windmill industry has regained its momentum and Abrasion resistant composite pipes used in Power plant Flue gas desulphurisation, Lime, Slurry, and Mineral conveyance application have also gained good growth.

Sales Overview

Revenues (excluding excise duty) of the Ceramics business grew by 24 per cent on standalone basis from ₹4013 million to ₹4985 million.

Metallized Cylinders and Wear Ceramics business continued the marketing efforts in targeting newer markets and partnering with global customers. Selective price increases were taken for majority of the products to mitigate cost push. Significant efforts in converting conventional wear resistant materials to Ceramic Wear Resistant Materials was done in repair and maintenance segment of domestic sector in Steel, Mineral Handling and Cement Industry. The business established entry into Japanese markets through qualifications at OEM's for supply of Ceramic lined bends. New products with backing materials were developed for addressing high impact applications. The business participated in Industry specific expos like Ceramitec, Powergen, Japan Fine Ceramics Expo, Hannover Messe, Fuel Cell Expo etc., to increase visibility, business development and for keeping abreast with the changing technology.

The Refractory, Prodorite and Composite business delivered 25% growth during this year. The division's sales were driven by good project orders, entry into annual rate contracts from Windmill, Steel and Cement players. This business is likely to benefit from the commodity up cycle and expansion of capacity in user industry.

Key Financial Summary

₹ million

Particulars	Standalone			Consolidated		
	2018-19	2017-18	Change (%)	2018-19	2017-18	Change (%)
Revenue (excluding excise duty)	4985	4013	24	6044	5025	20
Segment results (PBIT)	817	542	51	1082	759	43
Capital employed	3149	2984	6	4050	3902	4
Share to total revenue of CUMI (%) (without eliminations)	28	26		23	22	
Share to segment results (PBIT) of CUMI (%)	33	26		30	24	

Manufacturing

The new Metallized Cylinder manufacturing line with assets from NTK, Japan was fully operational during the year. The total combined capacity of Metallized Cylinder now is 1.7 million numbers. Approval for new cylinders has been obtained from global customers after rigorous testing spanning over many months. Commercial supplies of cylinders from NTK line to key customers - both domestic and exports has commenced during the year. The contract manufacturing for base level Ceramics which started in 2014-15 continued successfully during the current year.

The Industrial Ceramics Division received Gold rating for Manufacturing Excellence awarded by Frost & Sullivan.

The Industrial Ceramics division started its TPM journey in 2014-15 and with sustained and intense efforts, cleared TPM Health Check by CII TPM Club of India during January 2017. The division cleared the JIPM second stage assessment during November 2017 for TPM Excellence level I award, a key milestone in Company's quest for excellence. The division finally received the coveted Category A TPM Excellence award in March 2018 from JIPM. The division is now preparing for achieving JIPM TPM Consistency Award.

Continuing its quest for manufacturing excellence, the rolled throughput yield has been on a continuous upward trajectory since 2015-16. Overall Equipment Effectiveness parameter also registered a new high during the year. The division could implement multi-cavity mould for near net shape moulding and commissioned Ceramic Injection Moulding line. In-house raw material was produced for Engineering Ceramics and Metallized Ceramics product enabling a better grip on the quality and the timely availability.

The division successfully commissioned a pilot plant for Tape Casting and Sputtering Facility for manufacturing substrates and sensors used in various applications such as Space and Electronics.

Further, a New Spray Drier with Rotary Nozzle was commissioned for obtaining superior powder quality for Metallized Ceramics.

The business in last three years has made efforts in new technology and has registered a number of IPs. New products were launched in Alloy industry chemcast refractories, Composite refractory bricks for high temperature abrasion resistant for Coke ovens, Pressed refractory for Tin bath glass furnace, Abrasion resistant Anti-corrosive products and Construction chemicals.

Electrominerals

Business Profile

The major product groups of this segment are Fused Alumina (comprising Brown and White Alumina), Silicon Carbide (crude, macro and fine), Alumina Zirconia, Fused Zirconia, Zirconia Bubble and

Mullite. The Company also manufactures a range of 'specialities' like Semi Friable, Treated grains, Azures and fine powders for niche markets. The operations are carried out through eight manufacturing facilities located in India, Russia and South Africa. To enhance its operational competencies, the business operates its own bauxite & sand mines and 12 MW Hydel power plant to insulate it from the fluctuations in power tariffs.

The business focusses on aggressive growth in the domestic and export market while catering to the requirements from internal customers. With a diversified product portfolio, the Electrominerals business provides customers with application specific products and solutions, aimed at attaining an improved product profitability and value. For this, the business ensures speedy execution of projects, enhanced asset utilisation and also undertakes joint product development programmes with the customers.

The backbone of new product development and speciality business is a dedicated and focussed R&D team and a DSIR approved R&D facility. The team anchors the new product development driving IPR creations across the Company. The business continues to pursue its focus on new and emerging areas of opportunities like battery and related areas through tie ups for technology and commissioning pilot scale plants.

Key user industries for this business are Abrasives, Refractories, Steel, Brake linings, Nuclear energy, Wooden Laminates, Friction composites, Diesel Particulate Filter, Semiconductor and others.

Industry Scenario

The domestic market has seen a revival of demand from the Refractory and Abrasives industry for all products. The initiatives taken by China on environmental regulations and pollution controls continued during the year. The restrictions imposed in fusion operations at plants without adequate pollution control devices has affected the availability of materials from China. The Company with its focus on supplying quality products with superior environment friendly production processes, emerged more competitive in the transformed market.

The global Fused Alumina markets continue to bank on capacities in China, which house the largest fusion facilities and raw material resources, some of which could be adversely impacted due to new environment regulations. The Company is largely a local player with customers based in India. Apart from the domestic players, imported products have a visible share in the Indian market. Market has seen volatility on many occasions in the price and availability of Calcined alumina, the key raw material for White Fused Alumina, as alumina refinery operations were affected in Brazil and Australia during the year. The business could narrow down the impact of Alumina price variations due to long term contracts with domestic Alumina suppliers.

In Silicon Carbide, China plays the lead role in production and supply in the world. The shift demand for green Silicon Carbide production due to a lower off take by photovoltaic customers has resulted in augmenting SiC black availability in China. VAW, Russia with a capacity of 0.08 million tons is one of the largest single location capacities in the world.

In the Fused Zirconia space, the global capacity could be approximately 0.07 million tons. China would occupy around 25 per cent of the global market. The Company with a capacity of 0.01 million tons is a significant player globally.

The Company continues to retain its position as one of the reputed manufacturers of Silicon Carbide and Fused Zirconia.

Sales Overview

The Electrominerals business on a standalone basis recorded revenues (excluding excise duty) of ₹4534 million compared to ₹4055 million in the previous year.

The Fused Aluminium Oxide business of the Company registered a moderate growth with both volume and prices going up in the domestic and international market in line with demand pull from the user industries - Abrasives and Refractories.

The fine powder business was affected due to the lower demand for diesel vehicles in Europe, which has resulted in a lower off take of Silicon Carbide fine powders by Diesel Particulate Filter customers. The demand from semiconductor applications was stable. The demand for micro powders has helped the business grow.

The Russian subsidiary ran at near full capacity. The volumes were higher in the current year over the last year.

Manufacturing

Manufacturing strategies focussed mainly on improving efficiencies through TPM initiatives and value creation through grain treatments. Continued focus on innovation and TPM measures enabled the business to be competitive and efficient in control of cost as an underlining measure to attain the targeted production volumes. The focussed Joint Development Programmes in selected areas with customers brought faster scaling up and solutions to pain areas.

The uncertainties on Zircon sand availability and price affected the Zirconia Bubble operations. The business has taken a conscious decision to convert this facility into White Fused Alumina production, wherein there is more clarity on material availability and market demand.

The business was successful in establishing its new synthetic Alumina variant ABV+ as a replacement for ABV. This helped the business in augmenting the production and sales volume of Alumina from the new facilities, while satisfying the additional demand from internal Abrasives.

The year saw highest volatility in the availability and price of critical raw materials like Zircon Sand, Bauxite, Alumina and Electrode in international and domestic market. While the Electrode price has started showing signs of cooling down, environmental restrictions on mining in India and world over continue to pose challenges in the availability of Alumina and Bauxite. To counter the shortage of Alumina, the business is exploring possibility of bulk sourcing Alumina from international sources.

Foskor Zirconia which is into production of Monoclinic Zirconia was also affected due to volatile input pricing. With the prices of electrode coming down, the business sees opportunities in Fusion Zirconia and variants.

The business has tied up with Indian Space Research Organisation (ISRO) for battery technology and has initiated a joint project with IIT Patna for developing Ceramic membranes. The business is also setting up a pilot scale facility for production of Graphene, Carbon nano tubes and Graphite.

The Russian plant ran at full capacity in the current year without any production disruptions. Input costs were kept at market competitive levels by way of prudent sourcing strategies. The business continued in its journey of introducing various grit sizes in the market. Toughening environmental regulations in China is estimated to augur well for the business going forward by way of price increase of Crystalline and Metallurgic product ranges.

Key Financial Summary

₹ million

Particulars	Standalone			Consolidated		
	2018-19	2017-18	Change (%)	2018-19	2017-18	Change (%)
Revenue (excluding excise duty)	4534	4055	12	10185	8834	15
Segment results (PBIT)	444	325	37	1279	1269	1
Capital employed	2893	2396	21	6062	5632	8
Share to total revenue of CUMI (%) (without eliminations)	26	26		38	38	
Share to segment results (PBIT) of CUMI (%)	18	16		36	40	

FINANCE

During the year, the Company generated ₹1217 million cash surplus from its operations on a standalone basis.

All debts have been serviced on time. The Company's long and short term borrowings (other than financial lease of ₹9 million) as on 31st March 2019 stands Nil. The capital expenditure program of ₹511 million was financed from internal accruals.

The Company continued to have a healthy cash generation during the year, due to prudent capital expenditure and efficient working capital management. The surplus has been parked in liquid schemes of mutual funds. The Company continues to be debt free despite capacities being created over the years. On similar lines, the debt at a consolidated level has come down by 25 per cent compared to the previous year from ₹1294 million to ₹967 million. The cash and cash equivalent level (net of borrowings) at a consolidated level stands at ₹953 million.

The debt equity ratio for the Company is almost Nil at a standalone level and 0.06 at a consolidated level. The Company's Balance Sheet remains robust and it augurs well for the Company to venture into its next phase of growth.

The credit ratings of the Company, 'A1+' for short-term borrowings and 'AA+Stable' for long-term borrowings were re-affirmed by CRISIL. Over the years, the Company has been resorting to a prudent mix of rupee and foreign currency borrowings to finance its operations and achieve reduction in financing cost. The Finance Cost at a standalone level is at ₹9 million compared to ₹15 million last year. The Company earned ₹34 million by investing surplus cash available for short term.

At a consolidated level, the interest cost has come down from ₹86 million to ₹85 million. The repayment of loans has helped in bringing down the finance cost. The capital expenditure program of ₹949 million was financed majorly out of internal accruals.

With the Indian entity enjoying a significant natural hedge, a cautious approach was adopted to hedge the remaining exposures. The Company adopts prudent tax management policies.

There are no material changes and commitments, affecting the financial position of the Company which have occurred between 31st March 2019 and the date of this report.

INDIAN ACCOUNTING STANDARDS (IND AS) - IFRS CONVERGED STANDARDS

The Company, its subsidiaries, joint ventures and associate in India adopted Ind AS with effect from 1st April 2016 pursuant to the Companies (Indian Accounting Standard) Rules, 2015 notified by Ministry of Corporate Affairs on 16th February 2015.

INTERNAL CONTROL

The Company has an Internal Control System commensurate with the size, scale and complexity of its operations. The controls have been designed and categorised based on the nature, type and the risk rating so as to effectively ensure the reliability of operations with adequate checks and balances.

The Internal Audit team evaluates the effectiveness and adequacy of internal controls, compliance with operating systems, policies and procedures of the Company and recommends improvements, if any. Significant audit observations and the corrective/preventive action taken or proposed to be taken by the process owners are presented to the Audit Committee. Periodic review of adherence to the agreed action plan is carried out. The scope of Internal Audit is annually determined by the Audit Committee considering the inputs from the Statutory Auditor and the Management.

Capital and revenue expenditures are monitored and controlled with reference to approved budgets. Investment decisions are subject to detailed evaluation and formal approval according to schedule of authority in place. Periodical review of capital expenditure with reference to benefits forecasted is done. Physical verification of assets is also periodically undertaken.

The Audit Committee reviews the overall functioning of Internal Audit on a periodical basis. The Committee also discusses with the Auditors periodically on their views on the financial statements including the financial reporting system, compliance with accounting policies & procedures, adequacy and effectiveness of the Internal Control Systems in the Company.

INTERNAL FINANCIAL CONTROLS

Internal Control is a process, effected by an entity's Board of Directors, Management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting and compliance - as defined by the Committee of Sponsoring Organisations (COSO) of the Treadway Commission (appointed by SEC USA).

As per Section 134 of the Companies Act, 2013, the term 'Internal Financial Controls' (IFC) means the policies and procedures adopted by the Company for ensuring:

(a) orderly and efficient conduct of its business, including adherence to company's policies,

(b) safeguarding of its assets,

(c) prevention and detection of frauds and errors,

(d) accuracy and completeness of the accounting records, and

(e) timely preparation of reliable financial information.

The three key components of IFC followed by the Company are:

i. Entity Level controls (ELC) that the Management relies on to establish the appropriate "tone at top" relative to financial reporting are - Code of Conduct, Enforcement of Delegation of Authority, Hiring and Retention practices, Whistle blower mechanism and other approved policies and procedures.

ii. Process Level controls (PLC), to ensure that processes are predictable, stable and consistently operating at the targeted level of performance, with only a normal variation are classified into Manual or IT - Dependent or Automated Controls. They are also classified as Preventive or Detective.

iii. General IT Controls to ensure appropriate functioning of IT applications and systems built by the Company to enable accurate and timely processing of financial data are - User Access rights management and Logical access; Change management controls; Password policies and practices; Patch management and License management; Backup and Recovery of data.

The adequacy of Internal Financial Controls is ensured by:

- Documentation of the risks and controls associated with the major processes;
- Validation and classification of existing controls to mitigate risks;
- Identification of improvements and upgrades to the controls;
- Improving the effectiveness of controls on residuary risks through data analytics;
- Performing testing of controls by the independent Internal Audit;
- Implementation of sustainable solutions to Audit observations.

The Audit Committee periodically reviews Internal Financial Controls to ensure that they are adequate and operating effectively.

HUMAN RESOURCES

The Company's HR Management goes beyond the set boundaries of compensation, performance reviews and development. It encompasses multiple factors such as the external environmental changes impacting business, risks that could arise from political, cost or legal angles, the employee's entire work-life cycle, business continuity etc. and then ensure timely interventions that build long-lasting capabilities to sustain and grow. With this goal in mind, the year 2018-19 saw several interventions in the HR space.

Employee Engagement

Employee engagement feedback from the survey completed in 2017-18 were analysed and published last year, seeing an upswing from the previous survey done 3 years ago. The organisation score increased overall by 9% and all SBUs had a positive increase as well. Besides publication of the results so that all employees are aware of the scores, Focus Group Discussions were also held to probe on low scoring areas and invite employees to contribute their ideas and concerns.

As an actionable in Employee Engagement, a Rewards and Recognition portal was launched during the year and popularised amongst employees. The portal has many different categories, a clear nomination process that brings greater transparency and award points that are recorded instantaneously and also enables employee to choose the award of his/her choice. The awards are also published on the portal and awardees felicitated, creating a buzz online.

Innovation

CUMind - a customised Innovation framework, based on the Design Thinking methodology was launched in 2017-18. During the year, a customised innovation HUB has been inaugurated as a physical space at the Sriperumbudur facility. Built out of recycled shipping containers, this unique space is being used for design thinking workshops, brainstorming sessions etc. and has many creative tool kits and other paraphernalia to aid the innovation process. Fifteen DOT workshops have been conducted to seed the design thinking methodology across cross-functional teams and specific functions. Six projects have been taken up post these workshops on development of breakthrough products, process and improvements.

Capability Building

A mentoring initiative was launched across CUMI titled Catalyst. This program aims at building a strong base of mentors across the organisation who are accessible on demand by the lower and middle levels of management. The mentorship covers a wide scope from personal development to career transitions. Mentors who have volunteered for this initiative underwent a workshop training on the basics of Mentoring from an external facilitator. This is a flexible self-directed program and employees can directly sign up to be mentored by any of the 29 mentor-volunteers, for any duration of time, without the intervention by HR.

The graduates of the CLP program completed last year, have progressed on their career road map as envisioned in their original Individual Development Plans and will be a good leadership pipeline for the future. Six Sigma training has been rolled out across Industrial Ceramics and the Abrasives SBUs to improve and strengthen process capabilities and efficiencies. 41employees have achieved Green Belt status and teams formed from this group have taken up business critical projects to be completed in 2019-20.

Learning & Development

Continuing the 5 Pillar approach to training that was launched last year, a variety of learning and development programs took place over the year. These five pillars are categorized as - needs based on the PMS system, training to manage a specific business requirement, execution excellence, skill-based training and innovation. The yearly training calendar has progressed as per plan with 85% completion and 2567 man days of training imparted.

Sales training has been a key focus area in the past year. The topics spanned sales funnel management, customer centricity and negotiation skills. The past year has also seen the launch of the SHAPE (Sales HR for Abrasives Performance and Engagement), a development initiative for the Abrasives Sales team. SHAPE aims to help sales teams become more nimble, efficient and flexible in their approach to customer needs, capability development and increased engagement. To begin with, 11 key competencies have been identified for the sales teams and defined along with proficiency levels grade and role-wise. In the coming year, these competencies will be assessed through a customised online tool and individual development plans will be framed.

'Super Appu' workshops have continued as per plan for the supervisory staff at the plants with 80 enrolments, of which 62 are now eligible for the final phase in 2019 based on attendance requirements. YOLO workshops for Management and Graduate Trainees were conducted as usual. Two senior leaders from the Company, who were selected for the Murugappa Leadership Program (MLP) at the Group level in association with IIM (A), have successfully completed course and graduated with flying colours.

The Four Disciplines of Execution by Franklin Covey which was launched to improve sales process at the Abrasives Marketing in 2017-18, has crossed several milestones now. The XPS index is at 3.2 and the tracking of lead indicators has brought greater robustness and discipline in all sales processes such as meeting customers, reporting, trouble shooting etc. E-learning has seen the use of Thors training on a large scale by the technical workforce across the organisation and the use of Globe smart (an online learning portal that offers cultural information to aid business etiquettes across different countries) by the Exports teams.

Talent Acquisition

Recruiting efforts have been focussed on strengthening R&D and innovation functions with the hiring of Ph.Ds across all the divisions. These specialists in material sciences will be working on projects and new product developments, towards new IP registrations including patents.

Career and Performance

The Career Progression Framework continues to be actively endorsed to employees as a means of enriching their career through cross-functional roles and a variety of work experiences. This has encouraged more employees to apply for transfers and movements across the organisation. Promotion assessments in line with this framework, are also conducted during appraisals so that both the role holder and the job are assessed on their suitability, to the worklevel in the hierarchy. The five qualitative assessment parameters continue to be used as a measure of providing insight to all AGMs and above on their People leadership, Execution Excellence, Process Excellence, Customer Centricity and Innovation.

Employee Relations

Long Term Settlement with employees have been completed at the Hosur Bonded Abrasives unit, Eastern Abrasives unit in Kolkata and Plant - II of the Electrominerals Unit at Edapally, Kerala. Cordial relationships have been maintained with employees and unions and the settlements have all brought in great flexibility in operations and high standards of productivity, involving TPM implementation as well.

Reimagining HR

Recognising that the Company has a large population of millennials now, which will increase in the coming years, their career aspirations and needs have been captured through surveys to better understand and manage this segment of the employee population. The HR team is also undertaking an exercise on "Reimagining HR" to develop a road map and strategic framework on HR for the years 2019 and 2020 that will tailor many key HR processes to suit the changing generation and work needs of the future. As a part of this, five key focus areas have been identified, namely - HR Structure & Effectiveness, Capability building for organisation, Performance Management, Employee Relations and Safe working environment.

Strategy

To build a greater strategic orientation to manage in the ever-changing business landscape, a workshop was organised for the Leadership team on the "Play to Win" framework. Using this framework, the team went on to formulate the business plans for CUMI 2025.

Safety and Health

The implementation of TPM methodologies has helped build better safety orientation and robust safety practices. Near-misses are closely monitored and reviewed at all units, with action taken to ensure the incident does not repeat. A Safety Excellence Model is being introduced this year at Group Level.

In the previous year, the Electrominerals Division has also received a Safety award from the Government of Kerala for excellence in Safety Practices.

ACHIEVEMENTS AND AWARDS

The year 2018-19 continued to be a year of recognition for the Company in varied fields.

As stated earlier, the Industrial Ceramics division, Hosur received the Gold Certificate of Merit in Manufacturing Excellence instituted by Frost & Sullivan. The Company's commitment to provide transparent and detailed disclosures in its Annual Report was felicitated by conferment of the Silver Shield under Category VIII - Manufacturing by the Institute of Chartered Accountants of India Awards for Excellence in Financial Reporting for the year 2017-18. The Company's non-woven product received the Golden Peacock Award for Innovative product for the year 2018 instituted by the Institute of Directors. The Company also received an award for Most Innovative Learning & Development practices from the Indian Society of Training and Development (ISTD) in the Private Sector category.

The Electrominerals division has been recognised as "Best Employer Brand" of Kerala State by the World HRD Congress. The Company's Maniyar Hydel power plant received the Shresta Suraksha Puraskar for safety performance by the National Safety Council. The Company's initiative to create a booklet on CUMI's CSR activities along with their impact on communities and stakeholders received the Bronze award for Best CSR Publication from the Association of Business Communicators of India (ABCI).

The Company also stood first overall in the Pride of Murugappa Awards instituted by the Murugappa Group with the maximum number of winners across the 11 award categories viz., Finance, New Product Development, Maintenance & Tooling, Manufacturing & Services, Supply Chain Management, Marketing & Communications and Environment, Health, Safety. In the Murugappa Group Shine awards that celebrates role models of the Spirit of the Murugappa Group - 5 Lights, CUMI employees received awards in the Quality, Passion and Responsibility categories.

The total staff on rolls of the Company (including joint ventures and subsidiaries) as on 31st March 2019 was 5144 with 3407 employees in India (previous year 5074 with 3285 employees in India).

PERFORMANCE OF SUBSIDIARIES

Volzhsky Abrasive Works, Russia operated its Silicon Carbide plant to near capacity. Sales increased from RUB 5095 million to RUB 5860 million due to higher volumes in Silicon Carbide and uninterrupted production. Abrasives and Refractories sales grew compared to last year owing to introduction of new products and expanding target markets. On the profitability front, the entity registered a growth in profitability (after tax) from RUB 814 million to RUB 829 million.

Foskor Zirconia, South Africa recorded a sales of ZAR 215 million compared to ZAR 155 million last year. The entity's loss has increased from 33 million ZAR to a loss of 49 million ZAR. The adverse movement arose due to significant high input cost and lower sales volumes. Despite the increase in revenues, the loss level increased owing to high fixed costs. Considering that its liabilities have exceeded its assets, the subsidiary's Auditors' have in their report made an observation on material uncertainty relating to going concern. Hence, the Auditors of the Company have reproduced the same in their consolidated Audit Report without modifying their opinion. Considering the challenging business conditions in South Africa, the Board of Foskor Zirconia Pty Limited is reviewing the business for initiating suitable measures in due course.

In CUMI Australia, the business in Lined Equipment continued to be good. Sales grew from AUD 18.1 million to AUD 20.8 million. Profit after tax grew from AUD 2.1 million to AUD 2.3 million.

Sterling Abrasives had a sales of ₹901 million, compared to the last year's sales of ₹803 million. Profit after tax increased from ₹91 million to ₹94 million. The user industry for this company is primarily the agro industry.

CUMI Abrasives and Ceramics Company, the Chinese subsidiary had a sales of CNY 21 million for the year, which is almost same at last year's level. The loss was CNY 1.7 million compared to loss of CNY 0.9 million last year mainly attributed by sale of aged inventories and the necessity to move to an alternate location.

The sales of CUMI America recorded a good growth of USD 9.3 million from USD 7.5 million driven mainly by the increase in sales of both Bonded Abrasives and Industrial Ceramics thereby reducing the loss levels. The loss was at USD 0.3 million in the current year as against USD 0.5 million loss in the previous year.

For CUMI Middle East, sales dropped from USD 3.2 million to USD 1.7 million. Profit for the year was at USD 0.002 million against a profit of USD 0.12 million during the previous year.

Southern Energy Development Corporation Limited (SEDCO), the gas based power generation subsidiary, recorded a sale of ₹187 million as against ₹239 million last year. The drop in revenue was due to adverse cyclone impact in the southern part of Tamil Nadu, because of which the production was disrupted for 3 months. Consequentially, profit after tax also dropped from ₹51 million to ₹19 million.

Net Access India, which provides IT facilities management and other allied services increased its sales from ₹401 million to ₹451 million. Profit after tax was at ₹26.7 million for the year 2018-19, almost flat at last year's level of ₹27.3 million owing to delay in project assignments.

CUMI International Limited, Cyprus recorded a revenue of USD 5.04 million representing mainly dividend income as against last year's income of USD 5.1 million.

CUMI Europe s.r.o, based out of Europe which is not in operation made a loss of CZK 0.2 million.

Performance of Associate and Joint Ventures are given in note no. 6A and 6B respectively of the consolidated financials. Consolidated

Financial Statements (incorporating the financial results of the Company, its subsidiaries and associate/joint ventures) have been provided in the Annual Report. Other than the associate/joint ventures referred in the Annual Report, there are no associate/joint venture companies within the meaning of Section 2(6) of the Companies Act, 2013. A statement containing the key financial highlights of each subsidiary, based on the financial statements prepared by them under applicable local regulations is also provided in the Annual Report.

ENTERPRISE VALUE ADDITION

The Company has been able to constantly add value, the summary of which is given below:

₹ million

Particulars	2018 - 19	2017 - 18	2016 - 17	2015 - 16	2014 - 15
Generation of Gross Value added	**5072**	**4550**	**3959**	**3789**	**3071**
(Excludes exceptional income)					
Breakup on Application of Value added					
Payment to employees and directors	1838	1760	1549	1429	1309
Payment to shareholders (on payment basis)	520	330	189	377	235
Payment to Government	946	732	543	564	374
Payment to Lender	0	0	33	64	49
Towards replacement and expansion	1768	1728	1645	1355	1104
	5072	**4550**	**3959**	**3789**	**3071**

- *Gross value added is Revenue Less Expenditure (excluding depreciation + expenditure on employees & directors service + Long term interest)*
- *Payment to Government is Current tax+ Dividend distribution tax*
- *Towards replacement and expansion is Retained earnings + Depreciation + Deferred tax*

RISKS, CONCERNS AND THREATS

The Company has constituted a Risk Management Committee aligned with the requirements of the Companies Act, 2013 and Listing Regulations. The details of the Committee and its terms of reference are set out in the Corporate Governance Report forming part of this Report.

The Company has a robust business risk management process to identify, evaluate and mitigate risks impacting business including those which may threaten the existence of the Company. This framework seeks to create transparency, minimise adverse impact on the business objectives and enhance the Company's competitive advantage. This also defines the risk management approach across the enterprise at various levels including documentation and reporting. The framework has different risk models which help in identifying risk trends, exposure and potential impact analysis at a Company level as also separately for the business segments. The Company also has developed a structured risk management policy encompassing the risk management objectives, principles, process, responsibility for implementation, maintenance of risk registers, risk reporting framework etc. Risk management also forms an integral part of the Company's Business Plan.

The Company operates across various technology platforms and product verticals built over the years. Relative advantages and disadvantages of such technologies are studied and advances are tracked. Any new technology may impact the performance of the Company in the long run. The Company seeks to address these technology gaps through continuous benchmarking of the existing manufacturing processes with developments in the industry and in this connection has made arrangements with technical research institutions and technology consultants. The Company has been making investments in the next level of Industry 4.0 in select modules. Industry 4.0 is the current trend of automation and data exchange in manufacturing technologies.

The dependence on power and fuel is very high in the Company. On an average, the Company consumes nearly 210 million units of electricity in a year. This is partly met out of own generation from Maniyar plant. The entire production of power from Maniyar is utilised by the Electrominerals division. Apart from this, electricity is generated at our subsidiary company SEDCO and consumed at our locations. The rest of the requirement of electricity is managed by purchase from State Electricity Boards. Utilisation of power remains one of the key factors which can impact the profitability either favourably or adversely based on the changes in the power cost. Another major challenge is the non-availability of power in certain areas where the businesses have been setup. As a strategy, the Company looks for opportunities to create captive power generation plants mainly to mitigate the challenges. The Company also explores ways to procure power from open access at a competitive rate.

The cost increase and availability of fuel is another area of concern. On an average the Company consumes 1630 million litres of various fuels, mainly High Speed Diesel/Superior Kerosene Oil. Any increase in the cost of fuel impacts the profitability in an adverse manner since the petroleum products are extensively used for our firing process across locations. The Company is also pursuing projects and process re-engineering to reduce the risks involved in fuel pricing.

The Company uses various raw materials like Bauxite, Calcined Alumina, Zirconia sand, Raw Pet coke and Quartz, which has high price volatility. Any price increase will have significant adverse impact on the profitability of the business. Therefore the Company enters into annual contracts to cover volatility due to price fluctuations and also looks for alternative sources to mitigate the adverse effects of the price volatility.

The Company deals with multiple currencies and is thus exposed to exchange risk on account of adverse currency movements. Foreign Exchange risk in foreign denominated loans, imports and exports are mitigated by adopting a country-based forex policy, periodic monitoring and use of hedging instruments. Efforts are being taken to manage both exports and imports to ensure that at Company level, there is a natural hedging mechanism.

As a risk mitigation measure to address cyber security threat and in continuation of the IT security review plan, during the year, the Company included log management and vulnerability assessment with Security Information and Event Management (SIEM), a continuous monitoring process, to identify any surge/incident at the network and application systems. The security threat awareness is published and promoted periodically to create awareness among stakeholders on handling the risk proactively. The security process is included as an important step in the IT strategy of the Company. There is considerable amount of work undertaken on scoping of information specific to the role defined to prevent any data or information leak.

The Company's input materials are not commoditised and does not warrant for any specific hedging to be undertaken. With respect to output materials, adverse impact of changes in commodity prices on user industries could impact the sales which are mitigated by development of alternate products, establishing new range of applications etc. as detailed above. The other mitigation measures for dealing with increase in fuel costs, non-availability of raw materials etc. have been dealt separately in above paragraphs.

BUSINESS OUTLOOK AND OPPORTUNITIES

India's GDP growth was estimated to grow at the rate of 7.3 per cent for fiscal year 2018-19 as against 6.7 per cent in the previous year 2017-18. As per IMF forecast, the GDP growth in Indian economy is now estimated to grow at 7.3 per cent in 2020 and 7.5 per cent in 2021.

According to CII report, there are seven key drivers for India's economic growth in 2019-20, including GST, Insolvency and Bankruptcy Code, ease of doing business, agriculture, credit flow, oil price and infrastructure. The report also pointed out that India should continue to guard against the risks of higher oil prices by increasing domestic oil production, providing a special window for oil marketing companies to procure oil and stepping up diplomacy with the US to continue to secure purchase from Iran.

There is greater momentum for infrastructure CAPEX projects - Sagarmala Project, Bharatmala Project, Setu Bharatam Project, Gujarat - Gorakhpur Gas Pipeline, could create significant opportunities for the Company.

In Automobiles and Auto ancillary industry, analysts believe that the demand outlook for the sector will remain positive in 2019 due to healthy sales momentum in rural areas and pick-up in economic activity. In addition, the Government's efforts to improve farmers' incomes will increase the demand for tractors and two-wheelers. Commercial vehicles will witness a sustained increase in demand due to the Government's thrust on infrastructure activities.

FIXED DEPOSITS

The Company has not accepted any deposits from the public falling within the ambit of Section 73 of the Companies Act, 2013 read with Companies (Acceptance of Deposits) Rules, 2014 and no amount of principal or interest was outstanding as on the Balance Sheet date.

LOANS AND INVESTMENTS

The particulars of loans, guarantees and investments covered under Section 186 of the Companies Act, 2013 are given below:

₹ million

Description	As on 31.03.2018	Movement (Net of Deletions)	As on 31.03.2019
Loans given by the Company	-	-	-
Corporate guarantee given by the Company	1726.64	58.34*	1784.98
Investments made by the Company	2568.57	(57.11)**	2511.46

**Due to Exchange difference*

***On account of fair valuation*

Current Investments: Investment in mutual funds as on 31.03.2019 was ₹935.65 million.

RELATED PARTY TRANSACTIONS

The Company as per the requirements of the Companies Act, 2013 and Regulation 23 of the Listing Regulations has a Policy for dealing with Related Parties.

In line with its stated policy, all Related Party transactions are placed before the Audit Committee for review and approval. Prior approval of the Committee is obtained on a quarterly basis for transactions which are of foreseen and repetitive nature. Omnibus approvals in respect of transactions cannot be foreseen or envisaged are also obtained as permitted under the applicable laws. The list of Related Parties is reviewed and updated periodically as per the prevailing regulatory conditions.

The details of transactions proposed to be entered into with Related Parties are placed before the Audit Committee for approval on an annual basis before the commencement of the financial year. Thereafter, a statement containing the nature and value of the transactions entered into by the Company with Related Parties is presented for quarterly review by the Committee. Further, revised estimates or changes, if any to the proposed transactions for the remaining period are also placed for approval of the Committee on a quarterly basis. Besides, the Related Party transactions entered during the year are also reviewed by the Board on an annual basis.

Directors' Report

All transactions with Related Parties entered during the financial year were in the ordinary course of business and on an arm's length basis and hence not requiring particulars to be entered in the Form AOC-2. Further, all transactions entered into with Related Parties during the year even at arms' length basis in the ordinary course did not exceed the thresholds prescribed under the Companies (Meetings of Board and its Powers) Rules, 2014 or Listing Regulations or the Company's Policy in this regard and hence no disclosure was required to be made in Form AOC-2. Accordingly, there are no contracts or arrangements entered into with Related Parties during the year to be disclosed under Sections 188(1) and 134(h) of the Companies Act, 2013 in Form AOC- 2.

There are no materially significant Related Party transactions made by the Company with its Promoters, Directors, Key Managerial Personnel or their relatives which may have a potential conflict with the interest of the Company at large.

The Company's policy on dealing with Related Parties as approved by the Board is available on the Company's website in the following link *https://www.cumi-murugappa.com/policies.html.* During the year, in line with the regulatory changes in the Listing Regulations, the policy on dealing with Related Parties was amended and approved by the Board. None of the Directors and KMPs had any pecuniary relationship or transaction with the Company other than those relating to remuneration in their capacity as Directors/Executives and corporate action entitlements in their capacity as shareholders of the Company.

CORPORATE SOCIAL RESPONSIBILITY

The Murugappa Group is known for its tradition of philanthropy and community service. The Group's philosophy is to reach out to the community by establishing service oriented philanthropic institutions in the field of education and healthcare as the core focus areas. The Company being a constituent of the Group has been upholding this tradition by earmarking a part of its income for carrying out its social responsibilities.

The Company continues to engage in Corporate Social Responsibility (CSR) activities directly as well as through implementation agencies in line with its stated CSR policy.

The Company set up the CUMI Centre for Skill Development (CCSD) in the year 2012 at Hosur, to build a skill bank of a technically competent and industry ready work force from the less privileged sections of the society. During the FY 2015-16, the Company replicated this model in Edapally, Cochin. CCSD provides specialised training based on National Council on Vocational Training syllabus for the rural youth drawn from socially and underprivileged sections of the society. Three year training is imparted with a stipendiary payment and free boarding facilities, thus enabling the enrolled students to earn while they learn. The job oriented skill training enhances their employability and aids in uplifting their socioeconomic status. The technically trained students can be employed by any industrial entity once they complete the training programme. The Company continues to harness the potential of CCSD centres so far established. During the year, 120 students from the CCSD, Hosur and Kochi passed with flying colours and graduated from the Centre. The Company takes pride in informing that few students have earned accolades at national/regional level for their par excellence performance in academic and technical areas. During the year, as part of its geographical expansion plans, the Company alongwith its joint venture - Murugappa Morgan Thermal Ceramics Limited has replicated this model in Ranipet, Tamil Nadu.

In addition to the CCSD, the Company has also been contributing to the cause of health and education by making grants to AMM Foundation. Further, during the year, grants were also made to Shri A M M Murugappa Chettiar Research Foundation (MCRC) for research in rural development.

AMM Foundation, an autonomous charitable trust, is engaged in philanthropic activities in the field of education and healthcare since 1953. The Company's focus areas for grants to implementing agencies continued to be in the education and health sector. The grant to AMM Foundation for the education sector was through contributions to Vellayan Chettiar Higher Secondary School, Tiruvottiyur (VCHSS) - which has been making a difference in the field of education for the past 50 years. The school runs with the vision - To provide Quality Education with good virtues, for the under privileged and marginalised communities around Tiruvottiyur. In addition to participating in the running expenditure of the school, the Company has also provided the students of the VCHSS a playground (football ground) developed with adequate facilities for excelling in sports.

With respect to healthcare, a grant to AMM foundation was made for establishing and operating a mobile health van at Uttarakhand in order to provide free primary healthcare at doorstep, diagnosis of diseases, if any through the mobile health lab, providing treatment through free medicines and creating awareness on the importance of healthcare in the nearby communities.

MCRC is a non-Governmental voluntary research organisation working on devices and technologies for rural application of eco-friendly technologies to combat pollution. MCRC is recognised by Department of Scientific and Industrial Research, Government of India as a Scientific and Industrial Research Organisation to conduct research in various areas and is approved by University of Madras, Chennai to offer Ph.D. programmes in the areas of Energy, Bioenergy and Biomass for rural development. During the year, a grant was made to MCRC for research and development on novel applications of medical textiles in rural India from natural sources. The thematic focus area of the project encompasses eradicating hunger, poverty and malnutrition, promoting preventive health care and ensuring environmental sustainability, ecological balance, protection of flora and fauna, conservation of natural resources and maintaining quality of soil, air and water.

The Company has a Hydel power plant in Maniyar, Kerala to meet the electricity requirements of its many facilities in Kerala. However, the incessant rains and resultant floods in Kerala during August 2018 caused disruption in the operations of the Hydel power plant. The Company contributed an amount of ₹15 million to the Kerala Chief Minister's Distress Relief Fund to aid the rescue and rehabilitation efforts of the State. The Electrominerals team in Kerala was at the forefront of relief efforts, opening up the plant/its canteens for relief camps, collecting and distributing material to flood affected communities and aiding rescue efforts in heavily flooded areas. The energetic employees of the Company regardless of the personal suffering they were undergoing during the floods, quickly formed rescue teams and assisted in rehabilitation activities.

Similarly, when the operations of the gas based power plant in Nallur (operated by our subsidiary Southern Energy Development Corporation Limited) was also severely impacted due to the Gaja cyclone, the employees actively involved themselves in the revival and rehabilitation support to the neighbouring community.

Besides the above, the Company also actively pursued local community assistance programmes in and around its plant and office locations anchored by its employees. The Super Refractories division undertook a project titled "The Adolescent Girl Child Program" targeted at imparting education on Good Touch, Bad Touch, and menstrual hygiene for adolescent girls of villages in and around Vellore district. Till date, over 30 government schools and over 3000 students have participated in these programs conducted jointly with a facilitator from an NGO and Government Child Welfare Department. The Company's CSR policy is available on the Company's website at the following link *https://www.cumi-murugappa.com/policies.html.* The Annual report on the CSR activities in the prescribed format is annexed hereto as Annexure B and forms part of this Report.

BUSINESS RESPONSIBILITY REPORTING

The Company's ethical and responsible behaviour complements its corporate culture. Being a public listed company, the Company recognises that its accountability is not limited only to its shareholders from a financial perspective but also to the larger society in which it operates. During 2016-17, consequent to the mandatory reporting of its business responsibility initiatives under the Listing Regulations, the Company had formulated a consolidated Policy on Business Responsibility which lays down the broad principles guiding the Company in delivering its various responsibilities to its stakeholders. The Policy is intended to ensure that the Company adopts responsible business practices in the interest of the social set up and the environment so that it contributes beyond financial and operational performance. A copy of the Policy is available at *https://www.cumi-murugappa.com/policies.html* and the Business Responsibility Report for the year ended 31st March 2019 in terms of Regulation 34 of the Listing Regulations is annexed to this Report as Annexure C.

GOVERNANCE

Board of Directors and Key Managerial Personnel

As at 31st March 2019, the Board of the Company comprised nine Directors of which majority (six) are independent. There were no changes in the Board composition during the year.

Mr. T L Palani Kumar, Mr. Sanjay Jayavarthanavelu and Mr. Aroon Raman who were appointed as Independent Directors at the Annual General Meeting (AGM) held on 1st August 2014 for a period of 5 years from the AGM date will hold office till close of business hours on 31st July 2019. Further, Mrs. Bharati Rao who was appointed as an Independent director at the AGM held on 3rd August 2015 for a period of 4 years from the AGM date will hold office till close of business hours on 2nd August 2019. Mr. Palani Kumar and Mrs. Bharati Rao are not seeking re-appointment.

Considering their age and past tenure of association with the Company, Mr. Sanjay Jayavarthanavelu and Mr. Aroon Raman are eligible to seek re-appointment as Independent Directors of the Company and have expressed their willingness to seek re-appointment for a further term of five years subject to the approval of the shareholders vide special resolution at the ensuing Annual General Meeting. Further, considering that Mr. Sanjay Jayavarthanavelu and Mr. Aroon Raman satisfy the independence criteria laid down under the Act and the Listing Regulations, the Board has recommended their re-appointment as Independent Directors of the Company for a second term of 5 years commencing from the date of AGM to the shareholders. Notice in this regard under Section 160 has been received from a Member.

Mr. K Srinivasan was re-appointed as the Managing Director by the shareholders at the Annual General Meeting held on 31st July 2017 for a period of two years from 23rd November 2017 and would be retiring from the services of the Company with effect from close of business on 22nd November 2019. The Nomination and Remuneration Committee at its meeting held on 26th April 2019 recommended the appointment of Mr. N Ananthaseshan as an Additional Director and Managing Director (Designate) of the Company with effect from 26th April 2019 to succeed Mr. K Srinivasan as the Managing Director upon his retirement for 3 years commencing from 23rd November 2019. The Board based on the Committee's recommendation has appointed Mr. N Ananthaseshan as an Additional Director. He is also appointed as the Managing Director (Designate) with effect from 26th April 2019 subject to the approval of the shareholders. Mr. Ananthaseshan will hold office as an Additional Director only upto the date of the ensuing AGM and a resolution seeking his appointment as a Director is also placed for approval of the shareholders in addition to the proposal seeking approval for his appointment as Managing Director. A notice in this regard u/s 160 has been received from a Member.

Mr. M M Murugappan, retires by rotation at the forthcoming Annual General Meeting and being eligible has offered himself for re-appointment. A proposal for his re-appointment is included in the Notice convening the 65th Annual General Meeting for consideration and approval by the shareholders.

The Company has received declarations from all its Independent Directors confirming that they meet the criteria of independence prescribed both under the Companies Act, 2013 and the Listing Regulations.

During the year, the Board based on the recommendation of the Nomination and Remuneration Committee as well as the Audit Committee, appointed Mr. Jagannathan Chakravarthi Narasimhan as the Chief Financial Officer with effect from 3rd August 2018.

Mr. K Srinivasan, Managing Director, Mr. Jagannathan Chakravarthi Narasimhan, Chief Financial Officer and Ms. Rekha Surendhiran, Company Secretary are the Key Managerial Personnel of the Company as per Section 203 of the Companies Act, 2013.

Board Meetings

During the year, six Board Meetings were held, the details of which are given in the Corporate Governance Report.

Board Evaluation

Pursuant to the provisions of the Companies Act, 2013 and the Listing Regulations, the Board carried out an annual performance evaluation of its own performance, the Directors individually as well as the evaluation of the working of its various Committees as per the evaluation framework adopted by the Board on the recommendation of the Nomination and Remuneration Committee. Structured assessment forms were used in the overall Board evaluation comprising various aspects of the Board's functioning in terms of structure, its meetings, strategy, governance and other dynamics of its functioning besides the financial reporting process, internal controls and risk management. The evaluation of the Committees was based on their terms of reference fixed by the Board besides the dynamics of their functioning in terms of meeting frequency, effectiveness of contribution etc.

Separate questionnaires were used to evaluate the performance of individual Directors on parameters such as their level of engagement and contribution, objective judgement etc. The Managing Director's evaluation was based on leadership qualities, strategic planning, communication, engagement with the Board etc.

The Chairman was also evaluated based on the key aspects of his role. The performance evaluation of the Independent Directors was carried out by the entire Board. The performance evaluation of the Chairman, the Board as whole and the Non-Independent Directors was carried out by the Independent Directors at their separate meeting held during the year.

Policy on Appointment and Remuneration of Directors

Pursuant to Section 178(3) of the Companies Act, 2013, the Nomination and Remuneration Committee of the Board has formulated the criteria for Board nominations as well as the policy on remuneration for Directors and employees of the Company.

The criteria for Board nominations lays down the qualification norms in terms of personal traits, experience, background and standards for independence besides the positive attributes required for a person to be inducted into the Board of the Company. Criteria for induction into Senior Management positions have also been laid down.

The Remuneration policy provides the framework for remunerating the members of the Board, Key Managerial Personnel and other employees of the Company. This Policy is guided by the principles and objectives enumerated in Section 178(4) of the Companies Act, 2013 and reflects the remuneration philosophy and principles of the Murugappa Group to ensure reasonableness and sufficiency of remuneration to attract, retain and motivate competent resources, a clear relationship of remuneration to performance and a balance between rewarding short and long-term performance of the Company. The policy lays down broad guidelines for payment of remuneration to Executive and Non-Executive Directors within the limits approved by the shareholders. During the year, the Remuneration policy was reviewed in line with the Listing Regulations by the Board. Further details are available in the Corporate Governance Report.

The Board Nomination criteria and the Remuneration policy are available on the website of the Company at *https://www.cumi-murugappa.com/policies.html.*

Composition of Audit Committee

The Audit Committee of the Board comprises only Independent Directors. Mr. T L Palani Kumar is the Chairman and other members are Mr. Sanjay Jayavarthanavelu, Mrs. Bharati Rao and Mr. Sujjain S Talwar. During the year, five Audit Committee meetings were held, the details of which are provided in the Corporate Governance Report.

Statutory Auditors

In line with the requirements of the Companies Act, 2013, the Company with the approval of the shareholders at the Annual General Meeting held on 31st July 2017 appointed M/s. Price Waterhouse Chartered Accountants LLP (Reg. No. FRN 012754N/N500016) (PwC) as the Statutory Auditors of the Company to hold office from the conclusion of 63rd Annual General Meeting until the conclusion of the 68th Annual General Meeting subject to annual ratification by the shareholders at every AGM, if required under the relevant provisions of the Act at a remuneration to be decided by the Board based on the recommendation of the Audit Committee.

At the AGM held on 3rd August 2018, the Statutory Auditor's appointment at a remuneration of ₹42 lakhs plus out of pocket expenses in connection with the audit and applicable taxes was ratified by the shareholders for the FY 2018-19. However, as the Companies (Amendment) Act, 2017 has dispensed with the requirement of annual ratification of the Statutory Auditor's appointment, there is no requirement to seek an annual ratification of their appointment this year.

As required under Regulation 33 of the Listing Regulations, the Auditors have confirmed that they hold a valid certificate issued by the Peer Review Board of the Institute of Chartered Accountants of India.

The Report given by M/s. Price Waterhouse Chartered Accountants LLP on the Financial Statements of the Company for the year ended 31st March 2019 is provided in the financial section of the Annual Report. There are no qualifications, reservations, adverse remarks or disclaimers given by the Auditors in their report. During the year under review, the Auditors have not reported any matter under Section 143(12) of the Companies Act, 2013 and hence there are no details to be disclosed under Section 134(3)(ca) of the Act.

Cost Auditors

Pursuant to Section 148 of the Companies Act, 2013 read with Companies (Cost Records and Audit) Rules, 2014 and amendments thereof, the Company is required to maintain cost accounting records in respect of products of the Company covered under CETA categories like Organic and Inorganic chemicals, Electrical or Electronic machinery, Steel, Plastic and Polymers, Ores and Mineral products, other Machinery, Base Metals etc. Further, the cost accounting records maintained by the Company are required to be audited.

The Board, on the recommendation of the Audit Committee, had appointed M/s. S Mahadevan & Co. (firm no. 000007), Cost Accountants, Chennai to audit the cost accounting records maintained by the Company under the said Rules for the FY 2018-19 on a remuneration of ₹400,000/-. Further, the said firm has also been appointed by the Board to conduct the cost audit for the FY 2019-20 on a revised remuneration of ₹4,50,000/-.

The Companies Act, 2013 mandates that the remuneration payable to the Cost Auditor is ratified by the shareholders. Accordingly, a resolution seeking the shareholders' ratification of the remuneration payable to the Cost Auditor for the FY 2019-20 is included in the Notice convening the 65th Annual General Meeting.

Secretarial Audit

M/s. R Sridharan & Associates, Practising Company Secretaries, Chennai was appointed as the Secretarial Auditor to undertake the Secretarial Audit of the Company for the FY 2018-19. The report of the Secretarial Auditor is annexed to and forms part of this Report (refer Annexure F). There are no qualifications, reservations, adverse remarks or disclaimers given by the Secretarial Auditor in the Report.

In terms of Regulation 24A of the Listing Regulations, there is no material unlisted subsidiary incorporated in India. Material unlisted subsidiary for the purpose of this Regulation is a subsidiary whose income/net worth exceeds 10% of the consolidated income/net worth respectively of the Company and its subsidiaries in the immediately preceding accounting year. Hence, there is no requirement for a Secretarial audit to be conducted for any of the Company's subsidiaries in India.

Compliance Management

The Company's in house compliance management system tracks compliances across the various factories and offices of the Company. This tool has a comprehensive coverage of the various applicable laws and is periodically updated based on the regulatory changes.

Corporate Governance

In terms of Regulation 34(3) read with Schedule V of the Listing Regulations, a separate section on Corporate Governance including the certificate from a Practising Company Secretary confirming compliance is annexed to and forms an integral part of this Report.

CEO/CFO Certificate

Mr. K Srinivasan, Managing Director and Mr. Jagannathan Chakravarthi Narasimhan, Chief Financial Officer have submitted a certificate to the Board on the integrity of the Financial Statements and other matters as required under Regulation 17(8) of the Listing Regulations.

DIRECTORS' RESPONSIBILITY STATEMENT

Pursuant to the provisions contained in Section 134(3)(c) of the Companies Act, 2013, the Board to the best of its knowledge and belief and according to the information and explanations obtained by it confirms that:

- in the preparation of the annual accounts, for the financial year ended 31st March 2019, applicable accounting standards have been followed and no material departures have been made from the same;
- the accounting policies mentioned in Note 3 of the Notes to the Financial Statements have been selected and applied consistently and judgments and estimates that are reasonable and prudent have been made so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit of the Company for that period;
- proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 2013 for safeguarding the assets of the Company for preventing and detecting fraud and other irregularities;
- the annual accounts have been prepared on a going concern basis;
- that internal financial controls to be followed by the Company have been laid down and that such internal financial controls are adequate and operating effectively;
- proper systems have been devised to ensure compliance with the provisions of all applicable laws and that such systems are adequate and operating effectively.

EXTRACT OF ANNUAL RETURN

The extract of the Annual Return in the prescribed form MGT 9 is annexed to and forms part of this Report (refer Annexure E) and a web link of the Annual Return in Form MGT-7 is provided in *www.cumi.murugappa.com.*

SECRETARIAL STANDARDS

The Company is in compliance with the Secretarial Standards on Meetings of the Board of Directors (SS-1) and Secretarial Standards on General Meetings (SS- 2).

ENERGY CONSERVATION, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS & OUTGO

The information on Energy Conservation, Technology Absorption, Expenditure incurred on Research & Development and forex earnings/outgo as required under Section 134(3)(m) of the Companies Act, 2013 read with Rule 8 of the Companies (Accounts) Rules, 2014 is annexed to and forms part of this Report (refer Annexure D).

SIGNIFICANT AND MATERIAL ORDERS PASSED BY THE REGULATORS OR COURTS

There are no significant and material orders passed by the regulators or courts or tribunals impacting the going concern status of the Company and its future operations.

PARTICULARS OF EMPLOYEES

The information on employees and other details required to be disclosed under Rule 5 of the Companies (Appointment and Remuneration of

Managerial Personnel) Rules, 2014 is annexed to and forms part of this Report (refer Annexure A).

Under the Company's Employee Stock Option Scheme 2007, no Option grants have been made since February 2012. The Employee Stock Option Plan 2016 (ESOP 2016) was implemented in February 2017 with the approval of the shareholders and currently governs the grant of Options to employees. During the year 2018-19, a grant of 156,750 options was made to eligible employees. The disclosures with respect to Options granted under the ESOP 2007 and ESOP 2016 are contained in the Corporate Governance Report. Further, the disclosures relating to Stock Options as per Securities and Exchange Board of India (Share based Employees Benefits) Regulations, 2014 read with the circular issued by SEBI on 16th June 2015 has been provided on the Company's website and is available in the link *https://www.cumi-murugappa.com/policies.html.* Both the ESOP Scheme 2007 and ESOP 2016 are in compliance with the SEBI (Share Based Employee Benefits) Regulations, 2014.

ACKNOWLEDGEMENT

The Board gratefully acknowledges the co-operation received from various stakeholders of the Company viz., customers, investors, channel partners, suppliers, government authorities, banks and other business associates during the year. The Board also places on record its sincere appreciation of all the employees of the Company for their commitment and continued contribution to the Company.

On behalf of the Board
Chennai
April 26, 2019

M M Murugappan
Chairman

ANNEXURES TO THE DIRECTORS' REPORT

All information furnished in the annexures relates to Carborundum Universal Limited, India as a standalone entity

ANNEXURE A

Statement of Employees' Remuneration

A. The details of top ten employees in terms of remuneration drawn during the financial year 2018-19 as per Rule 5(2) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 duly amended by the Companies (Appointment and Remuneration of Managerial Personnel) Amendment Rules, 2016 are as follows:

Name and Age	Designation/Nature of duties	Gross remuneration paid (₹)	Qualification & experience (years)	Date of commencement of employment	Previous employment
1	2	3	4	5	6
Srinivasan K (61)	Managing Director	23,213,606	B Tech (Mech) (39)	30.01.2002	Vice President - Wendt (India) Limited
Sridharan Rangarajan (53)	President - Corporate	14,795,270	B Com, ACA, Grad CWA (33)	22.06.2011	CFO, Indian Operations - TIMKEN
Ananthaseshan N (56)	MD - Designate & Head - Abrasives	12,408,857	M.Sc (Applied Science), M.Tech Material Science (33)	19.02.1986[g]	-
M Muthiah (59)	Executive Vice President, Human Resources	9,900,971	MA (SW) and PG Dip in Management (35)	15.10.2003	Plant HR Head, Hyundai Motor India Limited
Shyam S Rao (56)	Senior Vice President - Industrial Ceramics Division	7,723,028	B.Tech Metallurgy, MS Material Science, PhD Material Science (25)	07.05.1999	Widia India Limited
V G Rajendran (49)	Senior Vice President - Super Refractories and Prodorite Division	7,210,171	BE (Metallurgy) from Indian Institute of Metals, Kolkata and PGD in Management from IGNOU (30)	25.10.2017	C.O.O.- Foundry Division, Mahindra CIE Automotive Ltd
Jayan P S (59)	Executive Vice President - EMD	6,831,004	B.Sc & B.Tech (31)	30.11.1985[g]	-
Srikanth C (53)	Senior Vice President (Marketing) - Abrasives	5,721,734	BE Mechanical Engineering & MBA Marketing (32)	05.09.1992	Cutfast Abrasives Tools Limited
Jagannathan Chakravarthi Narasimhan (46)	Chief Financial Officer*	5,693,502	B Com, ACA, Grad CWA (20)	23.07.2018	CFO, Mindtree Limited
Vijayalakshmi D (53)	Senior Associate Vice President - Corporate Communications	5,092,196	B.Sc Physics (31)	21.01.2010	Ogilvy Public Relations Worldwide

Notes:

(a) Remuneration as shown above includes salary, allowances, Company's contribution to provident, superannuation and gratuity funds, medical facilities and perquisites valued as per income-taxrules. During the year, no Options were granted under the Employees Stock Option Scheme, 2007. During the year, eligible employees were granted in aggregate 156,570 Options under the Employee Stock Option Plan 2016. The employee wise grant details are available in the disclosure under SEBI (Share Based Employee Benefits) Regulations, 2015 uploaded in the website of the Company.The Employee Stock Options granted to employees in the earlier period are accounted based on fair value as per Indian Accounting standards.

b) The employment of the above persons is whole time in nature and terminable with 3 months' notice on either side.

c) Mr. Jagannathan Chakravarthi Narasimhan commenced his employment on 23rd July 2018 and was appointed as Chief Financial Officer of the Company effective 3rd August 2018.

d) Effective 18th January 2018, Mr. Sridharan Rangarajan has been deputed to Murugappa Management Services Limited.

e) Mr. K Srinivasan was re-appointed as the Managing Director from 23.11.2017 till 22.11.2019 with the approval of shareholders at the 63rd Annual General Meeting. He is subject to the service conditions of the Company. Mr. K Srinivasan, Managing Director did not take any increment during the FY 2018-19.

f) The above mentioned employees are not relatives (in terms of the Companies Act, 2013) of any Director of the Company. Further, no employee of the Company is covered by the Rule 5(2) (iii) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 (employee holding by himself or with his family shares of 2% or more in the Company and drawing remuneration in excess of the Managing Director). Hence, the details required under Rule 5(3) (viii) is not applicable.

g) Date of joining as graduate engineer trainee.

h) The remuneration details are for the year 2018-19 and all other particulars are as on 31st March 2019.

i) None of the employees of the Company other than Mr. K Srinivasan, Managing Director, Mr. Ananthaseshan N - MD - Designate & Head - Abrasives, Mr. Sridharan Rangarajan President-Corporate (on deputation) were in receipt of remuneration for the FY 2018-19 in excess of Rupees one crore and two lakh rupees per year or eight lakh and fifty thousand rupees per month.

B. The details of remuneration during the year 2018-19 as per Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 as amended by the Companies (Appointment and Remuneration of Managerial Personnel) Amendment Rules, 2016 as are as follows:

(i) Ratio of remuneration of each Director to the median remuneration of the employees of the Company for the financial year:

Name	Designation	Ratio
Mr. M M Murugappan	Chairman	20.07
Mr. T L Palani Kumar	Independent Director	2.01
Mr. Sanjay Jayavarthanavelu	Independent Director	2.13
Mr. Aroon Raman	Independent Director	2.03
Mrs. Bharati Rao	Independent Director	2.02
Mr. M A M Arunachalam	Non-Executive Director	1.89
Mr. P S Raghavan	Independent Director	1.84
Mr. Sujjain S Talwar	Independent Director	2.02
Mr. K Srinivasan	Managing Director	45.64

(ii) Percentage increase in the remuneration of each Director, Chief Executive Officer, Chief Financial Officer, Company Secretary in the financial year:

Name	Designation	Increase (%)
Mr. M M Murugappan	Chairman	-
Mr. T L Palani Kumar	Independent Director	(4.67)
Mr. Sanjay Jayavarthanavelu	Independent Director	15.43
Mr. Aroon Raman	Independent Director	8.95
Mrs. Bharati Rao	Independent Director	10.81
Mr. M A M Arunachalam	Non-Executive Director	1.59
Mr. P S Raghavan*	Independent Director	NA
Mr. Sujjain S Talwar*	Independent Director	NA
Mr. K Srinivasan	Managing Director	4.01
Mr. Jagannathan Chakravarthi Narasimhan**	Chief Financial Officer	NA
Ms. Rekha Surendhiran	Company Secretary	11.63

*Joined the Board during 2017-18 hence not comparable.
**Joined the Company during 2018-19 hence not comparable.

- The Directors remuneration comprises commission and sitting fees for attending the meetings of the Board which remain unaltered during the year. The decrease in remuneration to the Non-executive Directors was on account of the number of Board meetings attended by them during the year.
- Mr K Srinivasan's remuneration for the year 2018-19 includes an un-availed LTA component of FY 2016-17 received during the year which has been appropriately factored in while computing the increase % above. During the year, Mr. Srinivasan did not take any increment and hence there was no revision in his remuneration. The increase reflected above over the previous year remuneration is on account of his incentive payment for the FY 2017-18 which was effected in July 2018.
- Ms. Rekha Surendhiran's remuneration for the FY 2017-18 has been adjusted duly factoring the LTA availed for the previous year during that year.

(iii) Percentage increase in the median remuneration of employees in the financial year: 5.37 per cent (employees who were in employment for the whole of FY 2018-19 & whole of FY 2017-18 considered for this purpose in the respective financial years).

(iv) Number of permanent employees on the rolls of the Company as on 31st March 2019: 2243.

(v) The average annual increase in salaries of employees was 9.58% as compared to a decrease in managerial remuneration which was 11.17%. Hence, the confirmation with respect to exceptional circumstances for increase in managerial remuneration does not arise.

(vi) The Company affirms that the remuneration is in compliance with its Remuneration policy.

On behalf of the Board
M M Murugappan
Chairman

Chennai
April 26, 2019

ANNEXURE B

Annual Report on Corporate Social Responsibility (CSR) Activities

1.	A brief outline of the Company's CSR policy, including overview of projects or programs proposed to be undertaken and a reference to the web-link to the CSR policy and projects / programs	The Company is cognizant of its responsibility towards the society in which it operates and has been engaged in CSR activities directly through the establishment of skill development centre as well indirectly through contributions to AMM Foundation, an autonomous charitable trust, in the field of Education and Healthcare, in addition to pursuing activities for the benefit of community around its local areas of operations. In line with its objectives and practices, the CSR policy focuses on Health, Education and Skill Development. The policy is uploaded in the website of the Company.
2.	Website link where the CSR policy is uploaded	http://www.cumi-murugappa.com/policies.html
3.	The composition of the CSR Committee[#]	Mr. Aroon Raman (Chairman) Mr. P S Raghavan (Independent Director) Mr. K Srinivasan (Managing Director)
4.	Average net profit of the Company for last three financial years	₹1573.05 million
5.	Prescribed CSR Expenditure (two per cent of the amount as in item 4 above)	₹31.46 million
6.	Details of CSR spent during the financial year (a) Total amount to be spent for the financial year (b) Amount unspent, if any	 ₹31.46 million Nil

(c) Manner in which the amount spent during the financial year is detailed below:

₹ million

Sl.no	CSR Project or activity identified	Sector in which the project is covered	Project or Programs - location	Amount Outlay/direct by Co.	Amount spent on the projects or programs - 1) direct expenditure 2) overheads	Cumulative Expenditure upto reporting period	Amount spent Direct/agency
1	CUMI Centre for Skill Development	Enhancing employment skills in manufacturing sector	Hosur, Krishnagiri District, Cochin,Ernakulam District, Ranipet, Vellore District	15.73	15.73	15.73	Direct
2.	Grant to Vellayan Chettiar Higher Secondary School (VCHSS)	Education	Tiruvottiyur, Chennai	7.80	7.80	7.80	Agency[1]
3.	Mobile Health van	Healthcare	Haridwar, Uttarakhand	3.30	3.30	3.30	Agency[1]
4.	R&D on novel applications of medical textiles for Rural India	Rural Development	Tamil Nadu	4.63	4.63	4.63	Agency[2]
	Total			**31.46**	**31.46**	**31.46**	

In addition to the above, during the year 2018-19, the Company contributed ₹15 million to the Chief Minister's Relief Fund for providing relief to the victims of the heavy rains and resultant floods in Kerala.

Implementing Agency:
1. AMM Foundation
2. Shri A.M.M Murugappa Chettiar Research Centre (MCRC)

7. Reasons for shortfall in spend: NA
8. The implementation and monitoring of CSR Policy for the FY 2018-19 is in compliance with the CSR objectives and Policy of the Company.

On behalf of the Board

Chennai
April 26, 2019

K Srinivasan
Managing Director

Aroon Raman
Chairman - CSR Committee

ANNEXURE C

Business Responsibility Report

SECTION A: GENERAL INFORMATION ABOUT THE COMPANY

1.	Corporate Identity Number (CIN) of the Company			L29224TN1954PLC000318		
2.	Name of the Company			Carborundum Universal Limited		
3.	Registered address			'Parry House', 43 Moore Street, Chennai - 600001		
4.	Website			www.cumi-murugappa.com		
5.	E-mail id			cumigeneral@cumi.murugappa.com		
6.	Financial Year reported			1st April 2018 to 31st March 2019		
7.	Sector(s) that the Company is engaged in (industrial activity code-wise)					
	Group	**Class**	**Sub-class**	**Description**		**Sector**
	239	2399	23993	Manufacture of other non-metallic mineral products		Abrasives
	239	2393	23939	Manufacture of other porcelain and ceramic products		Ceramics
	007	0072	00729	Mining of other non-ferrous metal ores		Electrominerals
8.	List three key products/services that the Company manufactures/provides (as in Balance Sheet)			Abrasives, Industrial Ceramics and Electrominerals		
9.	Total number of locations where business activity is undertaken by the Company					
	(a) Number of International Locations (Provide details of major 5)			On a standalone basis, the Company does not have any manufacturing unit located outside India		
	(b) Number of National Locations			On a standalone basis, the Company carries manufacturing operations across 19 locations in India		
10.	Markets served by the Company			Local/State/National/International - All markets		

SECTION B: FINANCIAL DETAILS OF THE COMPANY

1.	Paid up Capital (INR)	₹ 189.15 million
2.	Total Turnover (INR)	₹ 18091.4 million
3.	Total Profit after taxes (INR)	₹ 1660.89 million
4.	Total Spending on Corporate Social Responsibility(CSR) as percentage of profit after tax (%)	₹ 31.46 million (1.89% as a percentage of profit after tax) (2% of the average net profits in preceding three years)
5.	List of activities in which expenditure in 4 above has been incurred	(a) Skill Development - Enhancing employment skills of under privileged youth in the manufacturing sector; (b) Education; (c) Medical facilities; (d) Rural development. For further details, please refer the Corporate Social Responsibility Report (Annexure B of Directors' Report)

SECTION C: OTHER DETAILS

1.	Does the Company have any Subsidiary Company/ Companies?	Yes. As on 31st March 2019, the Company has 5 direct subsidiaries. Its wholly owned subsidiary - CUMI International Limited has 7 subsidiaries. Out of the total 12 subsidiaries, 3 are situated in India and 9 are situated outside India.
2.	Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company?	Each subsidiary company carries out BR initiatives as per their local requirements.
3.	Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%]	The Company does business with reputed organisations who undertake BR initiatives as per their respective organisational policies. The CUMI Centre for Skill Development, a direct CSR initiative of the Company has been established in Hosur, Edapally and Ranipet. The CCSD is carried on jointly with the Company's joint venture entities M/s. Wendt (India) Limited, in Hosur and M/s. Murugappa Morgan Thermal Ceramics Limited in Ranipet.

Business Responsibility Report

SECTION D: BR INFORMATION

1. Details of Director responsible for BR

(a) Details of the Director responsible for implementation of the BR policy/policies

1.	DIN	00088424
2.	Name	K Srinivasan
3.	Designation	Managing Director

(b) Details of the BR head

No.	Particulars	Abrasives	Ceramics	Refractories & Prodorite	Electrominerals
1.	DIN	NA	NA	NA	NA
2.	Name	N Ananthaseshan	Shyam S Rao	V G Rajendran	P S Jayan
3.	Designation	MD - Designate & Head - Abrasives	Senior Vice President - Industrial Ceramics	Senior VP - Refractories & Prodorite	EVP - Electrominerals
4.	Telephone number	91-44-30006161			
5.	E-mail ID	cumibrr@cumi.murugappa.com			

2. Principle-wise (as per NVGs) BR Policy/policies

(a) Details of compliance

No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
i.	Do you have a policy/policies for	Y	Y	Y	Y	Y	Y	Y	Y	Y
ii.	Has the policy been formulated in consultation with the relevant stakeholders?	The policy(ies) has been framed keeping in mind the interests of the stakeholders at large.								
iii.	Does the policy conform to any national/international standards?	Various practises/processes emanating out of the policy(ies) conform to national/international standards.								
iv.	Has the policy been approved by the Board? If yes, has it been signed by MD/owner/CEO/appropriate Board Director?	Y	Y	Y	Y	Y	Y	Y	Y	Y
v.	Does the Company have a specified committee of the Board/ Director/Official to oversee the implementation of the policy?	Y	Y	Y	Y	Y	Y	Y	Y	Y
vi.	Indicate the link for the policy to be viewed online?	https://www.cumi-murugappa.com/policies.html								
vii.	Has the policy been formally communicated to all relevant internal and external stakeholders?	The policy(ies) has been disseminated on the Intranet as well as on the website of the Company.								
viii.	Does the Company have in-house structure to implement the policy/policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
ix.	Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/policies?	The individual policies by and large prescribe a grievance redressal mechanism for the stakeholders concerned. Wherever, the individual policies do not explicitly state the grievance redressal mechanism, grievances can be addressed to cumibrr@cumi.murugappa.com.								
x.	Has the Company carried out independent audit/evaluation of the working of this policy by an internal or external agency?	The Internal Auditors of the Company review the implementation of policies from time to time. The Company's various factories have been subject to audit by external certification agencies. No dedicated Business Responsibility audit has been conducted.								

(b) If answer to the question at serial number 2(a)(i) against any principle is 'No', please explain why: Not applicable

No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
i.	The Company has not understood the Principles	Not applicable								
ii.	The Company is not at a stage where it finds itself in a position to formulate and implement the policies on specified principles									
iii.	The Company does not have financial or manpower resources available for the task									
iv.	It is planned to be done within next 6 months									
v.	It is planned to be done within the next 1 year									
vi.	Any other reason (please specify)									

3. Governance related to BR

i. Indicate the frequency with which the Board of Directors, Committee of the Board or CEO assess the BR performance of the Company. Within 3 months, 3-6 months, annually, more than 1 year.

The assessment is a continuous process and there is no defined frequency at which this assessment is done.

ii. Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?

The Company publishes BR report annually and the report is available at *https://www.cumi-murugappa.com.*

SECTION E: PRINCIPLE-WISE PERFORMANCE

Principle 1: Businesses should conduct and govern themselves with ethics, transparency and accountability.

1. Does the policy relating to ethics, bribery and corruption cover only the Company? Yes/No. Does it extend to the group/ joint ventures/ suppliers/ contractors/ NGOs/ others?

Commitment to ethical and lawful business conduct is a fundamental shared value of the Board of Directors, Senior Management and all other employees of the Company. CUMI's value systems are aligned with the Murugappa Group's Values and Beliefs guided by the Five Lights - spirit of the Murugappa Group: Integrity, Quality, Passion, Respect and Responsibility towards all stakeholders and the communities that the Company operates in and serves. The Company as well as all companies within the CUMI Group - its subsidiaries, associates or joint ventures are governed by this philosophy in addition to the requirements of their local jurisdictions.

CUMI's Right path - a corporate manual setting out the corporate culture lays down the guidelines required to be adhered to by every employee both in letter and spirit. This manual prepared with a view to give clarity on ethical issues, maintaining transparency in all dealings and practice ethics in a dynamic business environment is required to be adhered by all employees. The Company's Code of Conduct, Code of Conduct for Prevention of Insider Trading, Diversity policy, Policy on prevention of sexual harassment, ethical guidelines on stakeholder dealing, Whistle Blower policy which are also enshrined in the Right Path serve as a guiding norm in matters relating to ethics, anti-bribery and anti-corruption for all employees. The anti-bribery clauses are made part of its contractual arrangements with suppliers, vendors etc.

The Company has a policy to do business with suppliers/contractors and others who are aligned with its value systems. Appropriate due diligence is exercised while selecting them. The Company has been conferred the prestigious Golden Peacock Award in Corporate Ethics in 2016-17 and also awarded the Golden Peacock Award for Corporate Governance in due recognition of its governance practices during the year 2017-18.

2. How many stakeholder complaints have been received in the past financial year and what percentage was satisfactorily resolved by the Management?

During the year, there was one referral made under the Whistle Blower policy of the Company regarding an altercation with a fellow employee which was investigated and closed satisfactorily. No complaint was referred under the BRR grievance redressal mechanism.

Principle 2: Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle.

The Company undertakes to assure safety and optimal resource use over the life-cycle of its products. The Company being material science technology oriented continuously innovates and strives for optimal resource use over the life cycle of the products it manufactures.

1. List up to 3 of your products or services whose design has incorporated social or environmental concerns, risks and/or opportunities:

Abrasives:

- Metal working fluids manufactured by the Abrasives segment are water solubles designed for easier effluent treatment, thereby having a low negative impact on environment.
- 'Fero' Grinding Wheel, developed with a fiber reinforced core can be re-cycled subsequent to use. This not only helps in keeping the costs under control, but also assists in reducing the carbon footprint.

Electrominerals:

- Two modern fusion facilities have been introduced to improve particulate emission control system. Additional efforts have been undertaken to reduce emission by making necessary structural changes within the facilities.
- Azure S - Improvements in the Selective Catalytic Reduction systems to avoid scrubbing process. A new product SiC fine powder is developed which is used for emission control in diesel vehicles.

  We have also successfully implemented a mechanism to eliminate any odour from Silicon Carbide fusion.

Industrial Ceramics:

- Technical Ceramics - Furniture for Solid Oxide fuel cells - used in alternate mode of power generation for green energy equipment.
- The Fired rejects from the Industrial Ceramics Division is internally sold to another division of the Company - Super Refractories - where it is crushed and used in Monolithics Product.

Super Refractories:

- In the Refractories division, efforts are taken to reduce the spillage loss, through TPM methodology. Further reduce - reuse - recycle approach is being implemented across all product processes.

The Company has dedicated state of the art Research and Development centres across its businesses certified by the Department of Scientific and Industrial Research (DSIR) serving as centres of excellence for research and strengthening the platform for competency & sustainable growth.

2. For each such product, provide the following details in respect of resource use (energy, water, raw material etc.) per unit of product (optional):

a. Reduction during sourcing/production/distribution achieved since the previous year throughout the value chain?

- Significant part (~30 per cent) of the energy requirement for the Electrominerals division - the major user of electric energy is from the Company's own Hydel power station - green energy. During the year, the floods in Kerala impacted the generation of power in the power station. However, despite a shutdown of its operations for a few months, the Company has been able to quickly commence operations after taking necessary steps to recover from the damage caused due to the floods.
- Almost entire power requirement for the Company's facilities in Tamil Nadu is met by SEDCO - our own gas based power station - clean power. Kilns and processes are designed to consume low energy per unit of production. This is managed by programs impacting both the primary and secondary energy consumption points through EnMS. The operations of this power station was also impacted due to the Gaja cyclone. However, again on a war footing the unit not only managed to commence operations but also was actively engaged in the revival and rehabilitation of the community in which it is located.
- SPC (Specific Power Consumption) & SFC (Specific Fuel Consumption) programmes are driven using TPM methodologies.
- The Company has assisted in TPM and 5S implementation at the suppliers' end to improve material yields and reduce energy consumption.
- A new backing treatment process has been developed and implemented by the Coated Abrasives manufacturing plant which is expected to save one million litres of water per month.
- Online monitoring systems were adopted across several plants using sensors and technology connectivity to eliminate physical recording in paper, print etc., and thereby saving use of paper.
- The Industrial Ceramics Division has installed a high capacity Effluent Treatment plant with which the permeate recovery from RO plant can be improved up to 85%. Using this RO permeate, about 18KL/day water has been recycled.
- The Company uses a cleaner gaseous fuel (LPG) in Metallized Cylinder manufacturing line. Combustion efficiency of gas firing is higher when compared to that of gas fuels. Further, the thermal mass of refractories in these furnaces is reduced to enable a faster firing cycle and thereby reducing the peak temperature offering by 5 per cent. This has helped in minimising the energy consumption to the extent of 20 per cent when compared to that of liquid fuels and long firing cycle.
- The Electrominerals division has set up a bio-waste treatment system for canteen wastes.
- We are a zero discharge Company in almost all locations.

As the Company's product range is over 20,000 SKUs, unit consumption is not an appropriate measure.

b. Reduction during usage by consumers (energy, water) has been achieved since the previous year?

- The Company has been continuously developing superior Grinding wheels that are more efficient in material removal resulting in lower power consumption by user entities.
- The Company develops superior Grains that have higher material removal per unit energy.
- The 'Fero' Grinding Wheels, developed with a fibre reinforced core, has achieved reduction of wheel weight to the tune of 20 per cent, capable of higher speeds and thereby reducing the power consumption.
- Four of the Abrasives divisions are EnMS 50001 - Energy Management System certified initiating management programmes from time to time.
- The Company has installed a solar energy plant at its Sriperumbudur, Tamil Nadu facility for generating power. During the year, the solar energy plant generated power to the tune of 15010 KW/Hr.
- The Company's Refractories division has adopted a Research and Development methodology in collaboration with its customers to improve the insulation properties of refractory products on account of which the customers save on the fuel being used for operations.
- Some of the Engineered Wear Resistant Tiles are being manufactured using direct molding instead of molding and cutting, leading to reduction in usage of raw materials.

3. Does the Company have procedures in place for sustainable sourcing (including transportation)? If yes, what percentage of your inputs was sourced sustainably?

The Company's integrated operations ensures sustainable exploitation of the available resources. Joint project opportunities amongst various business units improve efficiencies in sourcing besides resulting in product efficiencies.

Conscious efforts are made to ensure that everyone connected with the Company be it the value chain members, customers and recyclers are made aware of their responsibilities.

The Total Productivity Maintenance (TPM) practices across plants helps in not only achieving operational efficiencies but also results in energy conservation and sustainable operations. Usage of materials which are either recycled or capable of recycling assumes top priority. During the year 2017-18, the Coated Abrasives plant, Sriperumbudur received the JIPM Award for Excellence in Consistent TPM commitment. The JIPM Award for TPM Excellence, Category A was received by the Bonded Abrasives, Hosur Plant. Again JIPM Award for Excellence in Consistent TPM commitment was received by the Maraimalai Nagar Abrasives Plant and the Industrial Ceramics plant, Hosur received the JIPM Award for TPM Excellence, Category A during the year 2017-18. The recognition for TPM practises across various plants resonates with our focus for sustainable operations across the organisation.

The Company's energy conservation measures were duly recognised by the Energy Management Centre, Kerala by way of a special commendation for the initiatives undertaken by the Electrominerals division during FY 2018-19.

The Company's Industrial Ceramics division received the Frost and Sullivan Manufacturing Excellence award during the year in the Gold category in recognition of its sustainable and efficient manufacturing practices.

4. **Has the Company taken any steps to procure goods and services from local & small producers, including communities surrounding their place of work? If yes, what steps have been taken to improve the capacity and capability of local and small vendors?**

   The Company's global and complex operations does not complement the procurement of goods and services from local and small producers in its location of manufacturing operations. However, the Company interacts with the local & small producers at regular intervals on the business and quality requirements. Assured volumes instils confidence in them to supply quality products by adopting sustainable and safe practices. The Company from time to time provides training and guidance on optimum use of resources, thereby saving cost and time. This has resulted in the small producers manufacturing products which are benchmarks in quality, thereby gaining an edge over the market.

5. **Does the Company have a mechanism to recycle products and waste? If yes what is the percentage of recycling of products and waste (separately as <5%, 5-10%, >10%)?**

   Duly recognising that over consumption results in unsustainable exploitation of the planet's resources, the business units in the Company are committed to promoting sustainable consumption, including recycling of resources.

   The Company has sustainable processes in place to recycle the products and waste, post completion of the manufacturing life cycle.

   The Company has an integrated value cycle mapping process. For example: the setters (a process consumable) used in the Ceramic plant(s) is post usage sent to the Refractory plant(s) for use in Castable manufacture.

   The treated main waste is in the form of skeleton waste from jumbos. More than 50% of the gross loss from this waste is recovered in the form of marketable products. Further, the loss of grains in green form is completely recovered. The Grinding wheels which are rejected are further broken down and utilized for recovery of grains, which is again used in the manufacture of Grinding wheels.

   The Industrial Ceramics Division has created an in-house facility for making wooden pallets from scrapwood instead of fresh procurement of wood thus leading to saving in consumption of plywood and timber.

   In the Electrominerals Division, the byproducts/semi-converted materials of major products are being recycled completely.

   The Refractory division has established processes to reuse the mineral waste arising out of spillage, chipping, damage, grinding and after the life cycle of refractory lining from various user industries.

Principle 3: Businesses should promote the well-being of all employees.

Any organisation is as good as the people who work for it. The trusting and caring ecosystem allows the Company to nurture a workforce that works passionately in tandem with its core values.

The Company is committed to providing equal opportunities both at the time of recruitment as well as during the course of employment irrespective of caste, creed, gender, race, religion, disability etc. The Company strives to keep the workplace environment safe, hygienic, humane, upholding the dignity of the employees including conducting trainings and sending suitable communications on regular basis. The Company's strategic pillars for capability talent development, propelling performance and other dedicated HR initiatives continue to facilitate constant upgradation of the skill and competency of the employees.

CUMind, a customised innovation framework was launched last year enabling entrepreneurial minds to conceive, design and deliver new products, businesses, processes etc. to ensure the operations remain relevant and sustainable. During the year, under the leadership of the Board of Directors, a dedicated state of the art centre was inaugurated in Sriperumbudur for facilitating the employees to nurture and develop their innovative thinking skills. In recognition of its innovative measures, the Company during the year won the prestigious Golden Peacock award for innovative product/services for "Hi performance environment friendly innovative Scrub Pad for Kitchen utensil scouring".

To enhance technical know-how, sponsorship support is extended in Bachelors/Masters programmes in technology. The dedicated learning and development programmes enhance the right skill sets and relevant knowledge to employees to achieve operational and futuristic benefits. The learning solutions are designed as per the training need analysis.

Proactive steps and structured problem solving mechanisms with focus on people issues and periodical communication on business related issues ensure cordial industrial relations.

Providing and maintaining a safe and hygiene working environment is a continuous process at CUMI. Periodic awareness sessions, training on usage of protective equipments, identifying and eliminating unsafe conditions are given top priority. Most of our plants are BS-OHSAS 18001-2007 certified for occupational health and safety management systems. The Company continues its commitment to employ and empower women and its initiatives such as friendly work place policies for women, policy for prevention of sexual harassment, redressal mechanism in the form of Internal Complaints Committee, women welfare Committees etc. augurs well.

1. **Total number of employees:** The number of employees as on 31st March 2019 (including Non-Management staff) was 2243.
2. **Total number of employees hired on temporary/ contractual/ casual basis:** 3796
3. **Number of permanent women employees:** 114
4. **Number of permanent employees with disabilities:** 7
5. **Do you have an employee association that is recognized by Management?**

   Yes. There are recognised trade unions affiliated to various trade union bodies.
6. **What percentage of your permanent employees are members of this recognised employee association?**

   About 55 per cent of the employees are members of recognized employee associations.
7. **Number of complaints relating to child labour, forced labour, involuntary labour, sexual harassment in the last financial year and pending, as on the end of the financial year.**

No.	Category	No. of complaints filed during the financial year	No. of complaints pending as on end of financial year
1.	Child labour/forced labour/involuntary labour	Nil	Nil
2.	Sexual harassment	Nil	Nil
3.	Discriminatory employment	Nil	Nil

8. **What percentage of your under mentioned employees were given safety & skill up-gradation training in the last year?**

No.	Category of employees	Safety Training	Skill up-gradation
1.	Permanent Employees	100%	90%
2.	Permanent Women Employees	100%	90%
3.	Casual/Temporary/Contractual Employees	100%	55%
4.	Employees with Disabilities	100%	70%

Principle 4: Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised

1. **Has the Company mapped its internal and external stakeholders?**

   Yes. The Company has identified its internal and external stakeholders.
2. **Out of the above, has the Company identified the disadvantaged, vulnerable & marginalised stakeholders?**

   The Company's Corporate Social Responsibility (CSR) policy drives the initiatives undertaken by the Company towards the benefit of the disadvantaged, vulnerable and marginalised stakeholders. The systems and process in place to systematically identify stakeholders and for understanding their concerns and for engaging with them is reviewed from time to time. The feedback mechanism available for members and customers to assess the services levels and other complaints follows the spirit laid down herein.
3. **Are there any special initiatives taken by the Company to engage with the disadvantaged, vulnerable and marginalised stakeholders?**

   The Company on a periodical basis undertakes dedicated activities as a part of its CSR initiatives for the disadvantaged, vulnerable and marginalised stakeholders in and around the Company's factories/ plants. Education, sports and health aids are provided to schools in rural/under-developed areas and to schools supporting differently abled children. The Company acknowledges the importance of skill development in this competitive environment and has set up the CUMI Centre for Skill Development (CCSD) with the motto of 'Honing Skills Shaping Lives' at Hosur, Tamil Nadu & Edapally, Cochin (Kerala). During the year, the Company jointly with Murugappa Morgan Thermal Ceramics Limited has replicated this model in Ranipet, Tamil Nadu and plans to gradually expand to other locations as well. The CCSD has been set up to build a skill bank of a technically competent and industry ready work force by providing specialised training based on National Council Vocational Training syllabus for the rural youth drawn from socially and economically backward sections of the society. The Company also pursues other local community assistance programmes in and around its plant and office locations.

Principle 5: Businesses should respect and promote human rights.

1. **Does the policy of the Company on human rights cover only the Company or extend to the group/joint ventures/ suppliers/ contractors/NGOs/others?**

   The Company's policy on human rights is imbibed in its values represented in the Five Lights guiding the Company, its group companies and their employees across all spheres. The alignment with this value system is expected out of any person dealing with the Company.
2. **How many stakeholder complaints have been received in the past financial year and what per cent was satisfactorily resolved by the Management?**

   Nil under this principle.

Principle 6: Business should respect, protect, and make efforts to restore the environment.

1. **Does the policy related to Principle 6 cover only the Company or extends to the group/joint ventures/ suppliers/contractors/ NGOs/others?**

   Safeguarding and protecting the environment is a shared value of the Company and its subsidiaries, joint ventures and associates. However, these companies have their own Safety, Health and Environment policies depending on the nature of their business and the local regulatory requirements. The Company's suppliers and contractors would be governed by their respective policies. The Company exercises due diligence in the selection of suppliers/ contractors/others who are aligned with its value system.

2. **Does the Company have strategies/ initiatives to address global environmental issues such as climate change, global warming, etc.?**

   Being in the manufacturing business, the Company has mechanisms in place to ensure compliance with the applicable environmental laws. The Company is committed to be an environment friendly organisation and has a dedicated Environmental Policy across all its business units. The Company is an active player in practising initiatives to address environmental issues and ensuring sustainable development. Almost all the locations of the Company have received the ISO 14001 certificate for their Environment Management Systems and ISO 9001 for Quality Management Systems. Most of the plants are seen as Model Plants with Zero Discharge and Zero Emission. Further, the Risk Management framework covering the Environmental risks is reviewed on a periodical basis and the steps that are required to be taken for mitigating the related risks are analysed and implemented.

   The Company also recognises the significance of a greener belt by virtue of which a number of saplings are planted on a yearly basis to reduce the carbon footprint. The Company also continues to support to the cause of water scarcity by setting up rain water harvesting ponds.

3. **Does the Company identify and assess potential environmental risks?**

   Yes. Identification of potential environmental risks and the mitigation plan thereon is a continuous process. A report of the same is also placed before the Risk Management Committee of the Board of Directors on a periodical basis. Further, the Company also ensures that the effluent/emissions are within the permissible limits as prescribed by the statutory authorities.

4. **Does the Company have any project related to Clean Development Mechanism?**

   No, the Company has not undertaken any specific project related to the Clean Development Mechanism as per the Kyoto Protocol. However, all the manufacturing locations of the Company are certified ISO 14001 (Environment Management System), QMS - ISO 9001 (Quality Management System), OHSAS - 18001. Most of the plants are also certified with the EnMS ISO 5001:2011.

5. **Has the Company undertaken any other initiatives on - clean technology, energy efficiency, renewable energy, etc.?**

   The Company utilises its resources in an optimal and responsible manner ensuring sustainability through reduction, re-use, re-cycling and managing waste. Appropriate measures to check and prevent pollution are undertaken and wherever required assessment of environmental consequences, if any, is taken up with due regard to public interest. Equitable sharing of access and commercialization of biological and other natural resources and associated traditional knowledge is encouraged. The Company seeks to improve its environmental performance by adopting cleaner production methods, promotion of energy efficient and environmental friendly technologies. Suitable processes and systems are developed with contingency plans and processes that help in preventing, mitigating and controlling environmental damages caused due to the Company's operations.

   The Company partners with global leaders in the space of Solar (photovoltaic) energy, Clean coal, SOFC (solid oxide fuel cells), windmills and VLBS (very large scale battery storage). We co-create products for these companies/industries. Finer details on product/ solutions cannot be provided due to contractual obligations.

   For more details on the energy conservation initiatives - please refer Annexure D of the Directors' report for the FY 2018-19.

6. **Are the emissions/waste generated by the Company within the permissible limits given by CPCB/SPCB for the financial year being reported?**

   Yes, the Company being in manufacturing business, at all times ensures compliance with the applicable environmental laws. The Environment Policy of the Company and the ISO-14001 certification of its facilities reiterates its commitment to be an environment friendly organization setting standards in environment management.

7. **Number of show cause/legal notices received from CPCB/SPCB which are pending (i.e. not resolved to satisfaction) as on end of financial year:** Nil

Principle 7: Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.

1. **Is your Company a member of any trade and chamber or association?** Yes

   a. Confederation of Indian Industry
   b. Indian Ceramic Society
   c. Indian Refractory Manufacturers Association
   d. Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association
   e. Kerala Management Association
   f. MMA
   g. Employers Federation of India
   h. South India Chamber of Commerce
   i. SICMA - Europe

j. Lucideon in UK
k. The Institute of Indian Foundrymen

2. Have you advocated/lobbied through above associations for the advancement or improvement of public good?

The Company is not actively involved in lobbying. However, as a responsible corporate citizen, the Company as a part of industry associations/chambers makes recommendations/representations before regulators and associations for advancement and improvement of the industrial climate in India. The Company also represents its views/opinions on energy security & management, water, food security and sustainable business principles through various forums.

Principle 8: Businesses should support inclusive growth and equitable development.

1. Does the Company have specified programmes/ initiatives/ projects in pursuit of the policy related to Principle 8?

The Company upholds the Murugappa Group's tradition by earmarking a part of its income for carrying out its social responsibilities, even before the mandatory CSR provisions under the Companies Act, 2013 were notified. The Company believes that social responsibility is not just a corporate obligation that has to be carried out but it is one's dharma. Therefore, our philanthropic endeavours are a reflection of our spiritual conscience and this provides us a way to discharge our responsibilities to the various sections of the society. Despite being adversely impacted by the floods in Kerala during August 2018, the Company and its employees actively participated in the rescue and rehabilitation activities in Kerala. The Company continues its contribution in re-building Kerala. The Company contributed ₹15 million directly to the Chief Minister's Distress Relief Fund and provided several relief measures and materials to the community and its employees.

The CSR Committee, constituted for implementation of the well-defined CSR policy laid out by the Company, reviews the spend to be made and the projects for which such funds need to be allocated. The CSR policy highlights the responsibility statement of the Company towards CSR, the principles guiding the initiative, the manner of implementation and the reporting thereof. Skill Development, Education and Health care are the priority focus areas for the CSR initiatives of the Company.

The Company set up the CUMI Centre for Skill Development (CCSD) in the year 2012 at Hosur, to build a skill bank of a technically competent and industry ready work force. During the year 2015-16, the Company replicated this model in Edapally, Cochin and during 2018-19, the Company initiated establishing this model in Ranipet, Tamil Nadu.

The Centre provides specialised training based on National Council Vocational Training syllabus for the rural youth drawn from socially and underprivileged sections of the society. The three year training is imparted with a stipendiary payment and free boarding facilities, thus enabling the enrolled students to earn while they learn. The job oriented skill training enhances their employability and aids in uplifting their socioeconomic status. The technically trained students can be employed by any industrial entity once they complete the training programme. Running its 6th year of operation, the CUMI Centre for Skill Development (CCSD) believes in providing the right environment to candidates who emerge from deprived backgrounds and hone their skills to meet the future skill challenges of the world and not just for organisational purposes. Strategically located at Hosur (as well as in Cochin/Ranipet) connecting the borders of Karnataka, Tamil Nadu and Andhra Pradesh, the centre aims at attracting a diverse population also focusing specially on girl children as a healthy mix in each batch of students.

A portion of the CSR spend is also allocated for projects in the field of education/healthcare through implementing agency. The Company makes contributions to the Vellayan Chettiar Higher Secondary School (VCHSS), Tiruvottiyur, which has been making a difference in the field of education for the past 50 years. Tiruvottiyur being an area dominated by the fisher folk, most of the students in VCHSS belong to this community. With about 3000 students, this Government aided school provides quality education to the marginalised. The school runs with the vision - To provide Quality Education with good virtues, for the underprivileged. The school caters to the students from the marginalised communities around Tiruvottiyur. The educational qualification of the parents is maximum limited to schooling. Most families also face socioeconomic difficulties due to problems like alcoholism resulting in health issues, desertion by families etc. More than 250 students from the school receive educational assistance through the Touch a Life scheme. Almost all the students benefiting from this scheme belong to single parent family. With the amounts funded through CSR, this school is now equipped with laboratories for Physics, Chemistry, Botany, Microbiology & Zoology, a Computer Centre and a General Science Lab for high school and middle school sections to facilitate experiential learning among the students. Besides making grants for running the School, the Company has also contributed to the cause of providing the less privileged students adequate facilities for excelling in sports such as athletics/football by facilitating the establishment of a vast playground for use by the students of VCHSS. During the year, the Company has also made contributions to Shri A.M.M. Murugappa Chettiar Research Centre (MCRC) towards Research & Development initiatives for rural development. Termed as R&D on novel applications of medical textiles in rural India from natural sources, the thematic focus area of the project encompasses eradicating hunger, poverty and malnutrition, promoting preventive healthcare and ensuring environmental sustainability, ecological balance, protection of flora and fauna, conservation of natural resources and maintaining quality of soil, air and water. In Uttarakhand, the Company has contributed in providing a mobile health van to attend to the medical needs of the local community.

2. Are the programmes/projects undertaken through in-house team/own foundation/external NGO/government structures/ any other organization?

The Corporate Social Responsibility initiatives of the Company are implemented through an in-house team as well as through implementing agencies - AMM Foundation, an autonomous Charitable Trust and Shri A.M.M. Murugappa Chettiar Research

Centre (MCRC), a centre recognized by Department of Scientific and Industrial Research.

3. **Have you done any impact assessment of your initiative?**

   Replicating the CCSD model of Hosur in Cochin and Ranipet is a result of the impact assessment conducted by the Company. The additional CSR initiative during the year in the form of playground for the school is resultant of the impact assessment undertaken in that area.

4. **What is your Company's direct contribution to community development projects?**

   Please refer the CSR report in Annexure B of the Directors' report for the FY 2018-19 for complete details on the spend made by the Company during the financial year ended 31st March 2019.

5. **Have you taken steps to ensure that this community development initiative is successfully adopted by the community?**

   The Company's dedicated CCSD team operating at Hosur and Cochin constantly engages with the NGO's, residential associations etc. in and around the factories to understand and identify the deserving candidates from various backgrounds. Further, the students enrolled with CCSD along with their parents meet the executives of the centre on a monthly basis along with the residential association representatives and discuss on the positives that have been achieved through the programme. A two way flow of feedback - one from the Centre regarding the student's performance and another from the parent's end ensures that the student's development is taken utmost care of. Further, the representatives of the self-help groups, who also participate in the meeting, give their opinion on any other development programmes that can be initiated for the betterment of the students. The students enrolled at the centre are also highlighted the importance of being a responsible citizen; they regulate traffic at important junctions, initiate 5S, Cleanliness drives from their hostel rooms to external environment. The confidence and the professional conduct shown by the students is an acknowledgement to the Company of its successful implementation of the CCSD initiative.

   The indirect programmes for assisting communities in and around plant locations has also positively impacted & influenced those in the nearby communities.

Principle 9: Businesses should engage with and provide value to their customers and consumers in a responsible manner.

1. **What percentage of customer complaints/consumer cases are pending as on the end of financial year?**

   The total number of customer complaints across all businesses which were pending at the end of the year constitutes less than 5 per cent which have been subsequently resolved.

2. **Does the Company display product information on the product label, over and above what is mandated as per local laws?**

   Yes. Wherever relevant, the Company encourages that its packaging/labelling contain detailed information regarding safe handling, storage and use, which is over and above what is mandated as per local laws.

3. **Is there any case filed by any stakeholder against the Company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behaviour during the last five years and pending as on end of financial year:**

   None.

4. **Did your Company carry out any consumer survey/consumer satisfaction trends?**

   Yes. The Company on a periodical basis conducts various consumer survey/satisfaction trends. The Company put its customers at the fulcrum of its business strategy. The Company understands their requirements and provides them holistic solutions rather than merely supplying materials.

   The Company collaborates meaningfully with its customers for co-creating sustainable products and solutions. Dedicated customer/dealer meetings, customer plant visits, transparent and compliant product labelling ensures awareness creation for the product usage and safe disposal. Customer visits are not necessarily confined to their product needs but also extends to sharing of best practices like TQM, TPM etc. It is also worthy to note that a significant portion of the Company's business pertains to offering customised products. Hence, customer's requirements rank very high to the Company.

The Business Responsibility Policy of the Company governing its business sustainability efforts is available on the Company's website *www.cumi-murugappa.com.*

On behalf of the Board
M M Murugappan
Chairman

Chennai
April 26, 2019

ANNEXURE D

I. ENERGY CONSERVATION

All business divisions of the Company pursued energy conservation efforts relentlessly during the year. The energy conservation measures undertaken were in the nature of identifying and optimising the power consumption in various power intensive equipment, modifying the manufacturing process, replacing with efficient energy conserving equipment, enhancing cycle time and sourcing alternate fuels.

Fans, induction lamps, dust collectors and other consumer appliances were replaced with energy efficient products. LED lighting sand boiler flue gas excess air controls were installed. Overall Equipment Efficiency improvements were carried out. Modifications were done in equipment like power pack motor, cooling pump, hydraulic pump, tunnel oven duct and boiler nozzle. Installation of variable frequency drive for kilns, circulation fans, hot air blowers, induction lamps were some of the activities that were carried out for conservation of energy.

The above energy saving measures implemented across divisions considerably benefitted the Company. Further, energy saving was achieved by prudent sourcing of power from exchanges. To conserve conventional diesel and superior kerosene oil fuel, steps were taken to use alternate fuel which are being used more than 95% of its use.

During the year ended 31st March 2019, a capital investment of about ₹5 million was made on energy conservation equipment across the various SBUs.

II. TECHNOLOGY ABSORPTION

Efforts made towards technology absorption, adaptation and innovation

Aligning with the overall strategy under the technology pillar, development of high performance, innovative and exciting products was the main focus. Also, in line with the tagline to offer surface solutions for the user, select user industries were identified to offer end to end solutions by using design thinking and systems thinking approach.

Joint programs with various vendors and other divisions continued to drive competitiveness by improving capability and costs. New Polymer systems, new Vitrified Bond systems, grinding aids and new processes were used to develop a range of high performance products that offered growth in respective product groups.

Key new Bonded Abrasives products launched in the market were hi performance Ball grinding wheels, best in class Ball lapping wheels, New EX range of high performance Gear grinding wheels etc. CN range and Q bond range of internal grinding wheels with 2X-4X levels of performance were successfully established. New Bond systems in Snagging wheels and Face grinding wheels were established.

In the Coated Abrasives range, high-performance Zirconia Belts for Hand Tools application were scaled up. New range of cloth based discs for door frame applications was developed and scaled up. Metal application and rolls for metal fabrication were developed. These products were successfully established in Indian market and in specific global markets. High end Zirconia based fiber Disc based products were successfully launched in the market, enabling good growth in this segment. Development of Film based Abrasives was successfully established in four different applications and forms. New CUMI range of thin wheels were launched in the Indian market and successfully extended to select geographies outside India. In Vitrified mass market range, new set of products were launched and scaled up during the year.

Another Technology strategy was to create full range and offer complete grinding solutions (grind to finish) for customers. In this context, the business worked on developing solutions for Auto-after, car door frame and Crank and Cam grinding applications, with a focus on creating a full basket of products for its distributors and end users. Good progress was made through product launches across various product groups. In Non-woven segment, innovative product range were seeded in the home care segment, which helped gain new institutional customers. In the Industrial segment, new range of Hand Pads were launched and scaled up.

Design thinking approach continues to be the focus and most mass market developments follow this approach. In the area of application technology, systems thinking approach continues to drive product development efforts capturing all technical documents into systems documents to convey directly business impact to user industries.

The Ceramics business worked on a collaborative research for Tape casting process, MLCC products and Metallization process on Alumina substrates. Electrominerals division focussed on developing and establishing own process for producing Boehmite, new variance of Ceramic grains and Zirconia through alternate routes. MOU was signed for technology for Lithium-ion with ISRO & Ceramic membranes through plasma with IIT Patna.

Benefits derived as a result of the above efforts

The Company could establish improved range of Coated Abrasives products and Resin Bonded grinding wheels with high performance binders. High performance range of New latex Water proof paper sheet, discs for Auto after applications, VPZ+ range of rice whitening wheels, CN and Q bond range of hi performance premium Abrasives for internal grinding application products for modern trade for the Home segment in the Non-woven range and Cone polishing wheels were launched. New range of low temperature fired Vitrified wheels for precision grinding were presented to target markets.

The Refractory business could establish cutting edge products for FRP, construction chemicals, flue gas desulphurisation, Ceramics, Iron and Steel and Carbon Black industry. The Industrial Ceramics vertical could successfully launched thin film Metalized Ceramic and Alumina substrates for various applications. Electrominerals business could develop cost effective production of ceramic grains and new product development for battery applications.

Imported technology

No new technology was imported during the year. The details of the technology imported in the last 3 years reckoned from the start of the financial year 2018-19 is Nil.

III. EXPENDITURE ON RESEARCH AND DEVELOPMENT

The Company has set up several DSIR (Department of Science and Industrial Research) approved Research and Development (R&D) centres at all its divisions. Across the CUMI group of companies, there was continuous focus on technology innovations including creation of several IPs in form of patent/design/trademark registrations, peer review paper presentations in international forums and journals. The Company was instrumental in generating over 50 IPs in form of patent/design/trademark registrations during the year.

R&D efforts during the year continued to focus on new product/applications development. In Abrasives, hi performance grinding wheels were developed as detailed earlier in this Report. In Coated Abrasives, the new range of Cloth based disc & rolls for various applications were developed.

In the Industrial Ceramics division, thermal grade of ZrO_2 Nozzle product, Sintered Sic product, Metal matrix composite, Armour, RbSiC products and other alternate raw materials were developed.

Refractories division has developed many niche products during the year including high oxidation resistant Incinerator boiler tiles, high abrasion resistant coke and Wharf lining brick. Composites division, developed and launched niche products of Construction chemicals, sealants and adhesives as well as nacelle cover for Windmills.

Electrominerals division worked towards development of fused magnesia, high purity Alumina, Graphite for lithium battery, Graphene and CNT, production of Nano powders, Alumina Zirconia variant for coated applications. R&D centres continued to work for the future products to address the changing business environment - Light weighing, surface conditioning, combination backings etc.

EXPENDITURE ON R & D

₹ million

Description	2018-19
Capital expenditure (including CWIP)	55.75
Recurring	143.65
Total - A	199.40
Sales - B	17013.74
Total expenditure as a percentage of Sales (A/B)	1.17%

IV. FOREIGN EXCHANGE EARNINGS AND OUTGO

₹ million

Description	2018-19	2017-18
Foreign Exchange Earnings	3881	3571
Foreign Exchange Outgo		
- Revenue	3852	3427
- Capital	601	141

On behalf of the Board

Chennai
April 26, 2019

M M Murugappan
Chairman

ANNEXURE E

Extract of Annual Return

Form No. MGT-9
EXTRACT OF ANNUAL RETURN
as at the financial year ended 31st March 2019

[Pursuant to section 92(3) of the Companies Act, 2013 and rule 12(1) of the Companies (Management and Administration) Rules, 2014]

I. REGISTRATION AND OTHER DETAILS

i) Corporate Identification Number	L29224TN1954PLC000318
ii) Registration Date	21.04.1954
iii) Name of the Company	Carborundum Universal Limited
iv) Category/Sub-Category of the Company	Company Limited by Shares/Indian Non-government Company
v) Address of the Registered office and contact details	''Parry House'', 43, Moore Street, Chennai - 600001 Tel: +91-44-30006161 Fax: +91-44-30006149 e-mail: investorservices@cumi.murugappa.com
vi) Whether listed company Yes / No	Yes
vii) Name, Address and Contact details of Registrar and Transfer Agent	Karvy Fintech Private Limited* Unit: Carborundum Universal Limited Karvy Selenium Tower B, Plot 31-32, Financial District, Nanakramguda, Serilingampally Mandal, Hyderabad 500032 Tel: +91-40-67162222 Fax: +91-40-23420814 e-mail: einward.ris@karvy.com

* During the year 2018-19, consequent to a merger scheme, the Registry operations of M/s Karvy Computershare Private Limited was transferred to Karvy Fintech Private Limited.

II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

All the business activities contributing 10% or more of the total turnover of the Company shall be stated:

Sl. No.	Name and Description of main products/services	NIC Code of the Product/service	% to total turnover of the Company*
1.	Abrasives	23993	52.51
2.	Ceramics	23939	28.37
3.	Electrominerals	00729	19.12

*Does not include inter-segment sales

Extract of Annual Return

III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

Sl. No.	Name and address of the Company	CIN	Holding/ Subsidiary/ Associate	% of Shares held	Applicable Section
Direct holding					
1.	Net Access India Limited 'Parry House', VI Floor, 43 Moore Street, Chennai - 600 001	U74999TN1997PLC039545	Subsidiary	100.00	2(87)(ii)
2.	Southern Energy Development Corporation Limited 'Parry House', 43 Moore Street, Chennai - 600 001	U40100TN1985PLC012425	Subsidiary	84.76	2(87)(ii)
3.	Sterling Abrasives Limited Plot No 45/46 G I D C Industrial Estate, Odhva Road Ahmedabad - 382 415	U29259GJ1979PLC003467	Subsidiary	60.00	2(87)(ii)
4.	CUMI International Limited 284 Arch. Makarou III Ave. Fortuna Court, 2nd Floor, 3105 Limassol Cyprus	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
5.	CUMI (Australia) Pty Limited Level 1, 56 Hudson Street, Hamilton NSW 2303	Company Incorporated outside India	Subsidiary	51.22	2(87)(ii)
Holding through CUMI International Limited (a wholly owned subsidiary)					
6.	Volzhsky Abrasives Works 404130 Volzhsky,Volgograd Region, 6th Avtodoroga, 18 Russia	Company Incorporated outside India	Subsidiary	98.07	2(87)(ii)
7.	Foskor Zirconia (Pty) Limited PO Box.1, Phalaborwa, South Africa, 1390	Company Incorporated outside India	Subsidiary	51.00	2(87)(ii)
8.	CUMI America Inc. 7310 Turfway Road, Ste 550, Florence Kentucky 41042 USA	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
9.	CUMI Middle East FZE No. 315, BC - 3 PO Box. 16190, RAK FZE Trade Zone, Ras Al Khaimah, United Arab Emirates	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
10.	CUMI Abrasives & Ceramics Company Limited East of Donghuan Road, Yanjiao Development Zone, Sanhe City, Hebei Province, P.R., China, 065201	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
11.	Thukela Refractories Isithebe Pty Ltd. No.1 Yellow Street, Isithebe, South Africa	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
12.	CUMI Europe s.r.o Bucharova 2657/12 bld c 158000 Prague, Czech Republic	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
Joint Ventures					
13.	Murugappa Morgan Thermal Ceramics Limited PB NO 1570, Dare House Complex 5th Floor Extn 2, NSC Bose Road, Chennai - 600 001	U26919TN1982PLC009622	Associate/ Joint Venture	49.00	2(6)
14.	Ciria India Limited P-11 Pandav Nagar, Mayur Vihar Phase-1 New Delhi - 110 091	U74899DL1997PLC091417	Associate/ Joint Venture	30.00	2(6)
15.	Wendt (India) Limited 105, 1st Floor, Cauvery Block, National Games Housing Complex, Koramangala, Bangalore - 560 047	L85110KA1980PLC003913	Associate/ Joint Venture	39.87	2(6)

Extract of Annual Return

IV. SHAREHOLDING PATTERN (Equity share capital breakup as percentage of total equity)

i) Category-wise shareholding

Sl. No	Category of Shareholders	No. of Shares held at the beginning of the year (1st April 2018)				No. of Shares held at the end of the year (31st March 2019)				% Change during the year
		Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
A.	**Promoters**									
(1)	**Indian**									
a)	Individual/HUF	7,260,318	-	7,260,318	3.84	6,570,718	-	6,570,718	3.47	(0.37)
b)	Central/State Govt(s)	-	-	-	-	-	-	-	-	-
c)	Bodies Corporate	56,446,944	-	56,446,944	29.87	56,446,944	-	56,446,944	29.84	(0.03)
d)	Banks/FI	-	-	-	-	-	-	-	-	-
	Sub-total (A)(1)	63,707,262	-	63,707,262	33.72	63,017,662	-	63,017,662	33.31	(0.41)
(2)	**Foreign (A)(2)**									
a)	NRIs -									
	Individuals	-	-	-	-	-	-	-	-	-
b)	Others -									
	Individuals	-	-	-	-	-	-	-	-	-
c)	Bodies Corporate	-	-	-	-	-	-	-	-	-
d)	Banks/FI	-	-	-	-	-	-	-	-	-
	Sub-total (A)(2)	-	-	-	-	-	-	-	-	-
	Total shareholding of Promoter (A) = (A)(1)+(A)(2)	63,707,262	-	63,707,262	33.72	63,017,662	-	63,017,662	33.31	(0.41)
AA.	**Promoter Group**									
(1)	**Indian**									
a)	Individuals/HUF	6,507,004	-	6,507,004	3.44	5,869,084	-	5,869,084	3.10	(0.34)
b)	Bodies Corporate/ others	9,936,920	-	9,936,920	5.26	11,214,440	-	11,214,440	5.93	0.67
	Sub-total (AA)(1)	16,443,924	-	16,443,924	8.70	17,083,524	-	17,083,524	9.03	0.33
(2)	**Foreign**									
a)	NRIs -									
	Individuals (AA)(2)	-	-	-	-	52,000	-	52,000	0.03	0.03
	Total shareholding of Promoter Group (AA)=(AA)(1)+(AA)(2)	16,443,924	-	16,443,924	8.70	17,135,524	-	17,135,524	9.06	0.36
	Total shareholding of Promoter & Promoter Group (A)+(AA)	80,151,186	-	80,151,186	42.42	80,153,186	-	80,153,186	42.37	(0.05)

Extract of Annual Return

Sl. No	Category of Shareholders	No. of Shares held at the beginning of the year (1st April 2018)				No. of Shares held at the end of the year (31st March 2019)				% Change during the year
		Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
B.	**Public Shareholding**									
(1)	**Institutions**									
a)	Mutual Funds	39,639,657	-	39,639,657	20.98	40,174,590	-	40,174,590	21.24	0.26
b)	Banks/FI	160,183	-	160,183	0.08	73,887	-	73,887	0.04	(0.04)
c)	Central/State Govt(s)	-	-	-	-	-	-	-	-	-
d)	Venture Capital Funds	-	-	-	-	-	-	-	-	-
e)	Insurance Companies	4,799,098	-	4,799,098	2.54	4,715,489	-	4,715,489	2.49	(0.05)
f)	FIIs	8,730,708	3,000	8,733,708	4.62	9,703,851	3,000	9,706,851	5.13	0.51
	Sub-total (B)(1)	53,329,646	3,000	53,332,646	28.22	54,667,817	3,000	54,670,817	28.90	0.68
(2)	**Non-Institutions**									
a)	**Bodies Corporate**									
i)	Indian	11,729,118	141,090	11,870,208	6.28	12,709,676	1,40,980	12,850,656	6.80	0.52
ii)	Overseas	-	-	-	-	-	-	-	-	-
b)	**Individuals**									
i)	Shareholders holding nominal share capital upto ₹1 lakh	26,449,040	2,607,071	29,056,111	15.38	25,005,647	2,034,883	27,040,530	14.30	(1.08)
ii)	Individual shareholders holding nominal share capital in excess of ₹1 lakh	10,432,254	140,460	10,572,714	5.60	9,647,937	140,460	9,788,397	5.17	(0.43)
c)	**Others**									
i)	Clearing members	76,606	-	76,606	0.04	222,585	-	222,585	0.12	0.08
ii)	NRI	3,085,265	31,260	3,116,525	1.65	3,069,268	31,260	3,100,528	1.64	(0.01)
iii)	Trusts	21,910	-	21,910	0.01	21,910	-	21,910	0.01	-
iv)	NBFCs Registered with RBI	241,950	-	241,950	0.13	130,417	-	130,417	0.07	(0.06)
v)	Investor Education and Protection Fund Authority	515,895	-	515,895	0.27	591,673	-	591,673	0.31	0.04
vi)	Alternative Investment Fund	-	-	-	-	583,476	-	583,476	0.31	0.31
	Sub-total (B)(2)	52,552,038	2,919,881	55,471,919	29.36	51,982,589	2,347,583	54,330,172	28.73	(0.63)
	Total Public Shareholding (B)=(B)(1)+(B)(2)	105,881,684	2,922,881	108,804,565	57.58	106,650,406	2,350,583	109,000,989	57.63	0.05
C.	**Shares held by Custodian for GDRs & ADRs**	-	-	-	-	-	-	-	-	-
	Grand Total (A+B+C)	**186,032,870**	**2,922,881**	**188,955,751**	**100.00**	**186,803,592**	**2,350,583**	**189,154,175**	**100**	**NA**

**Decrease in shareholding % of promoter/promoter group holding is attributed to increase in share capital arising on account of allotment of equity shares to employees who have exercised their options during the year under the Company's ESOP Scheme 2007 and ESOP Plan 2016.*

Extract of Annual Return

(ii) Shareholding of Promoters

Sl No.	Shareholder's Name	Shareholding at the beginning of the year			Shareholding at the end of the year			% Change in shareholding during the year
		No. of shares	% of total shares of the Company	% of shares Pledged / encumbered to total shares	No. of shares	% of total shares of the Company	% of shares Pledged / encumbered to total shares	
1	M V Murugappan HUF	215,600	0.11	-	215,600	0.11	-	-
2	M V Murugappan jointly with M A Alagappan and M M Murugappan	480	0.00	-	480	0.00	-	-
3	M V Subbiah	514,294	0.27	-	514,294	0.27	-	-
4	M A Alagappan	1,274,400	0.67	-	1,274,400	0.67	-	-
5	A Vellayan	303,260	0.16	0.03	303,260	0.16	-	-
6	A Venkatachalam	598,900	0.32	0.03	598,900	0.32	0.03	-
7	M M Murugappan	985,940	0.52	-	696,340	0.37	-	(0.15)
8	M M Venkatachalam	524,420	0.28	-	124,420	0.07	-	(0.21)
9	M A M Arunachalam	1,100,600	0.58	0.01	1,100,600	0.58	0.01	-
10	S Vellayan	694,544	0.37	-	694,544	0.37	-	-
11	Arun Alagappan	471,400	0.25	0.00	471,400	0.25	0.00	-
12	V Arunachalam	183,740	0.10	-	183,740	0.10	-	-
13	V Narayanan	205,900	0.11	-	205,900	0.11	-	-
14	M M Muthiah	-	-	-	-	0.00	-	-
15	M M Veerappan	-	-	-	-	0.00	-	-
16	Arun Venkatachalam	186,840	0.10	-	186,840	0.10	-	-
17	M V Subramanian	-	-	-	-	0.00	-	-
18	M V Muthiah	-	-	-	-	0.00	-	-
19	Ambadi Investments Limited	56,054,244	29.67	-	56,054,244	29.63	-	(0.03)
20	Ambadi Enterprises Limited	384,700	0.20	-	384,700	0.20	-	-
21	Cholamandalam Financial Holdings Limited (formerly known as TI Financial Holdings Limited)	6,000	0.00	-	6,000	0.00	-	-
22	E.I.D. Parry (India) Limited	2,000	0.00	-	2,000	0.00	-	-
23	New Ambadi Estates Private Limited	-	-	-	-	0.00	-	
24	Coromandel International Limited	-	-	-	-	0.00	-	
25	Murugappa & Sons (M.V. Murugappan, M.A. Alagappan and M.M. Murugappan hold shares on behalf of the Firm)	-	-	-	-	-	-	
26	Tube Investments of India Limited	-	-	-	-	-	-	
	Total	63,707,262	33.72	0.07	63,017,662	33.31	0.04	(0.40)

** The above table does not include the holdings of promoter group aggregating to 17,135,524 shares (9.06%) as at 31st March 2019.*

** Decrease in shareholding % is attributed to increase in share capital arising on account of allotment of equity shares to employees who have exercised their Options during the year under the Company's ESOP Scheme 2007 and ESOP Plan 2016.*

(iii) Change in Promoters' Shareholding

Sl.No.	Particulars	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the Company	No. of shares	% of total shares of the Company
1	**Aggregate holdings at the beginning of the year**	**63,707,262**	**33.72**		
2	**Transactions during the year ended 31st March 2019**				
i)	**M M Murugappan**				
	At the beginning of the year	985,940	0.52		
	Transfer-31/12/2018 (transfer by way of Family Settlement)	(289,000)	(0.15)	696,340	0.37
	At the end of the year	-	-	696,340	0.37
ii)	**M M Venkatachalam**				
	At the beginning of the year	524,420	0.28		
	Transfer-31/12/2018 (transfer by way of Family Settlement)	(200,000)	(0.11)	324,420	0.17
	Transfer-25/03/2019 (transfer by way of Family Settlement)	(200,000)	(0.11)	124,420	0.07
	At the end of the year			124,420	0.07
3	**Aggregate holdings at the end of the year**			**63,017,662**	**33.31**

1. There was no change in other promoter's shareholding other than the details specified above.
2. Decrease in shareholding percentage is attributed to increase in share capital arising on account of allotment to equity shares of employees who have exercised their Options during the year under the Company's ESOP Scheme 2007 and ESOP Plan 2016.
3. The above table does not include changes in shareholding of Promoter Group during the year.

(iv) Shareholding Pattern of top ten Shareholders (other than Directors & Promoters)

Sl. No.	For each of the top 10 shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the Company	No. of shares	% of total shares of the Company
1	HDFC Trustee Company Limited (under various schemes)				
	At the beginning of the year	16,873,797	8.93		
	Transactions during the year ended 31st March 2019				
	Transfer-25/05/2018 (Purchase)	1,000	0.00	16,874,797	8.93
	Transfer-08/06/2018 (Purchase)	100,000	0.05	16,974,797	8.98
	Transfer-22/06/2018 (Purchase)	12,500	0.01	16,987,297	8.99
	At the end of the year			16,987,297	8.98
2	SBI Magnum Midcap Fund/SBI Mutual Fund				
	At the beginning of the year	4,047,303	2.14		
	Transactions during the year ended 31st March 2019				
	Transfer-21/12/2018 (Purchase)	64,000	0.03	4,111,303	2.17
	Transfer-25/01/2019 (Purchase)	200,000	0.11	4,311,303	2.28
	At the end of the year			4,311,303	2.28
3	Smallcap World Fund, Inc				
	At the beginning of the year	4,365,000	2.31		
	Transactions during the year ended 31st March 2019				
	At the end of the year			4,365,000	2.31
4	Shamyak Investment Private Limited				
	At the beginning of the year	4,000,000	2.12		
	Transactions during the year ended 31st March 2019				
	At the end of the year			4,000,000	2.11

Extract of Annual Return

Sl. No.	For each of the top 10 shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the Company	No. of shares	% of total shares of the Company
5	Reliance Capital Trustee Company Limited				
	At the beginning of the year	3,105,141	1.64		
	Transactions during the year ended 31st March 2019				
	Transfer-13/07/2018 (Purchase)	92,473	0.05	3,197,614	1.69
	Transfer-27/07/2018 (Purchase)	2,659	0.00	3,200,273	1.69
	Transfer-02/11/2018 (Sale)	(150,000)	(0.00)	3,050,273	0.02
	Transfer-09/11/2018 (Sale)	(50,000)	(0.00)	3,000,273	0.02
	Transfer-16/11/2018 (Sale)	(29,987)	(0.00)	2,970,286	0.02
	Transfer-04/01/2019 (Purchase)	400,240	0.00	3,370,526	0.02
	Transfer-11/01/2019 (Purchase)	600,000	0.00	3,970,526	0.02
	Transfer-22/03/2018 (Sale)	(855,154)	(0.00)	3,115,372	0.02
	At the end of the year			3,115,372	1.65
6	General Insurance Corporation of India				
	At the beginning of the year	3,000,000	1.59		
	Transactions during the year ended 31st March 2019				
	At the end of the year			3,000,000	1.59
7	L&T Mutual Fund Trustee Limited				
	At the beginning of the year	7,468,583	3.95		
	Transactions during the year ended 31st March 2019				
	Transfer-06/04/2018 (Purchase)	67,981	0.04	7,536,564	3.99
	Transfer-13/04/2018 (Purchase)	5,000	0.00	7,541,564	3.99
	Transfer-20/04/2018 (Purchase)	56,400	0.03	7,597,964	4.02
	Transfer-27/04/2018 (Purchase)	10,000	0.01	7,607,964	4.03
	Transfer-04/05/2018 (Purchase)	43,265	0.02	7,651,229	4.05
	Transfer-18/05/2018 (Purchase)	10,615	0.01	7,661,844	4.05
	Transfer-01/06/2018 (Purchase)	64,836	0.03	7,726,680	4.09
	Transfer-08/06/2018 (Purchase)	20,871	0.01	7,747,551	4.10
	Transfer-13/07/2018 (Purchase)	2,533	0.00	7,750,084	4.10
	Transfer-20/07/2018 (Purchase)	100,696	0.05	7,850,780	4.15
	Transfer-27/07/2018 (Purchase)	68,156	0.04	7,918,936	4.19
	Transfer-03/08/2018 (Purchase)	64,093	0.03	7,983,029	4.22
	Transfer-10/08/2018 (Purchase)	137,000	0.07	8,120,029	4.30
	Transfer-24/08/2018 (Purchase)	48,904	0.03	8,168,933	4.32
	Transfer-31/08/2018 (Purchase)	11,096	0.01	8,180,029	4.33
	Transfer-07/09/2018 (Purchase)	4,193	0.00	8,184,222	4.33
	Transfer-28/09/2018 (Purchase)	8,294	0.00	8,192,516	4.33
	Transfer-12/10/2018 (Purchase)	16,112	0.01	8,208,628	4.34
	Transfer-19/10/2018 (Purchase)	32,001	0.02	8,240,629	4.36
	Transfer-26/10/2018 (Purchase)	67,655	0.04	8,308,284	4.39
	Transfer-02/11/2018 (Purchase)	40,000	0.02	8,348,284	4.42
	Transfer-30/11/2018 (Purchase)	2,500	0.00	8,350,784	4.42
	Transfer-21/12/2018 (Purchase)	6,648	0.00	8,357,432	4.42
	Transfer-28/12/2018 (Purchase)	18,352	0.01	8,375,784	4.43
	Transfer-11/01/2019 (Sale)	(1,060,000)	(0.56)	7,315,784	3.87
	Transfer-25/01/2019 (Sale)	(200,000)	(0.11)	7,115,784	3.76
	Transfer-01/02/2019 (Purchase)	95,000	0.05	7,210,784	3.81
	Transfer-15/02/2019 (Purchase)	28,071	0.01	7,238,855	3.83
	Transfer-22/02/2019 (Purchase)	18,641	0.01	7,257,496	3.84
	Transfer-01/03/2019 (Purchase)	7,175	0.00	7,264,671	3.84
	Transfer-08/03/2019 (Purchase)	11	0.00	7,264,682	3.84
	Transfer-15/03/2019 (Sale)	(86,939)	(0.05)	7,177,743	3.79
	Transfer-22/03/2019 (Sale)	(2,000,000)	(1.06)	5,177,743	2.74

Extract of Annual Return

Sl. No.	For each of the top 10 shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the Company	No. of shares	% of total shares of the Company
	Transfer-29/03/2019 (Sale)	(438,000)	(0.23)	4,739,743	2.51
	At the end of the year			4,739,743	2.51
8	Sundaram Mutual Fund (under various schemes)				
	At the beginning of the year	-	-		
	Transactions during the year ended 31st March 2019				
	Transfer-15/06/2018 (Purchase)	125,989	0.07	125,989	0.07
	Transfer-22/06/2018 (Purchase)	65,555	0.03	191,544	0.10
	Transfer-29/06/2018 (Purchase)	42,500	0.02	234,044	0.12
	Transfer-31/08/2018 (Purchase)	18,848	0.01	252,892	0.13
	Transfer-07/09/2018 (Purchase)	4,497	0.00	257,389	0.14
	Transfer-07/12/2018 (Purchase)	1,476	0.00	258,865	0.14
	Transfer-28/12/2018 (Purchase)	4,076	0.00	262,941	0.14
	Transfer-29/03/2019 (Purchase)	2,753,468	1.46	3,016,409	1.59
	At the end of the year			3,016,409	1.59
9	Franklin India Smaller Companies Fund				
	At the beginning of the year	2,174,305	1.15		
	Transactions during the year ended 31st March 2019				
	Transfer-25/05/2018 (Purchase)	158,896	0.08	2,333,201	1.23
	Transfer-01/06/2018 (Purchase)	1,104	0.00	2,334,305	1.23
	Transfer-08/06/2018 (Purchase)	131,004	0.07	2,465,309	1.30
	Transfer-29/06/2018 (Purchase)	68,996	0.04	2,534,305	1.34
	At the end of the year			2,534,305	1.34
10	Aditya Birla Sun Life Trustee Private Limited				
	At the beginning of the year	3,083,438	1.63		
	Transactions during the year ended 31st March 2019				
	Transfer-25/05/2018 (Purchase)	20,000	0.01	3,103,438	1.64
	Transfer-20/07/2018 (Sale)	(74,255)	(0.04)	3,029,183	1.60
	Transfer-31/08/2018 (Sale)	(3,000)	(0.00)	3,026,183	1.60
	Transfer-07/09/2018 (Sale)	(3,200)	(0.00)	3,022,983	1.60
	Transfer-14/09/2018 (Sale)	(208,029)	(0.11)	2,814,954	1.49
	Transfer-12/10/2018 (Purchase)	1,100	0.00	2,816,054	1.49
	Transfer-02/11/2018 (Purchase)	25,800	0.01	2,841,854	1.50
	Transfer-28/12/2018 (Sale)	(90,164)	(0.05)	2,751,690	1.46
	Transfer-22/03/2019 (Sale)	(200,000)	(0.11)	2,551,690	1.35
	At the end of the year			2,551,690	1.35
11	ICICI Prudential Life Insurance Company Limited				
	At the beginning of the year	1,567,509	1.94		
	Transactions during the year ended 31st March 2019				
	Transfer-27/07/2018 (Purchase)	58,533	0.03	1,826,042	0.97
	Transfer-03/08/2018 (Purchase)	72,180	0.04	1,898,222	1.00
	Transfer-10/08/2018 (Purchase)	27,011	0.01	1,925,233	1.02
	Transfer-17/08/2018 (Purchase)	11,461	0.01	1,936,694	1.02
	Transfer-24/08/2018 (Purchase)	26,072	0.01	1,962,766	1.04
	Transfer-31/08/2018 (Purchase)	29,771	0.02	1,992,537	1.05
	Transfer-07/09/2018 (Purchase)	38,057	0.02	2,030,594	1.07
	Transfer-14/09/2018 (Purchase)	349,706	0.18	2,380,300	1.26

Extract of Annual Return

Sl. No.	For each of the top 10 shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the Company	No. of shares	% of total shares of the Company
	Transfer-21/09/2018 (Purchase)	224,118	0.12	2,604,418	1.38
	Transfer-28/09/2018 (Purchase)	292,126	0.15	2,896,544	1.53
	Transfer-05/10/2018 (Purchase)	391,855	0.21	3,288,399	1.74
	Transfer-01/03/2019 (Purchase)	116,295	0.06	3,404,694	1.80
	Transfer-08/03/2019 (Purchase)	141,558	0.07	3,546,252	1.87
	Transfer-15/03/2019 (Purchase)	97,101	0.05	3,643,353	1.93
	Transfer-22/03/2019 (Purchase)	1,653	0.00	3,645,006	1.93
	Transfer-29/03/2019 (Purchase)	534,787	0.28	4,179,793	2.21
	At the end of the year			4,179,793	2.21
12	Aadi Financial Advisors LLP				
	At the beginning of the year	2,183,509	1.16		
	Transactions during the year ended 31st March 2019				
	Transfer-05/10/2018 (Sale)	(5,999)	(0.00)	2,177,510	1.15
	Transfer-02/11/2018 (Sale)	(170,660)	(0.09)	2,006,850	1.06
	Transfer-11/01/2019 (Sale)	(478,776)	(0.25)	1,528,074	0.81
	Transfer-30/03/2019 (Sale)	(100,873)	(0.05)	1,427,201	0.75
	At the end of the year			1,427,201	0.75

Notes:

1. As the Company is listed, its shares are traded on a daily basis and hence the above dates refer to the respective beneficiary position dates.
2. The above list comprises top 10 shareholders as on 1st April 2018 and as on 31st March 2019.
3. The % change in holding despite nil changes during the year is on account of increase in share capital upon allotment of equity shares to employees who have exercised their options under the Company's ESOP Scheme 2007 and ESOP Plan 2016.
4. The holdings of the shareholders have been combined based on PAN and folio no / client ID

(v) Shareholding of Directors and Key Managerial Personnel

Sl. No.	For each of the Directors and KMP	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the Company	No. of shares	% of total shares of the Company
1	M M Murugappan				
	At the beginning of the year	985,940	0.52		
	Transactions during the year ended 31st March 2019				
	Transfer-31/12/2018 (transfer by way of Family Settlement)	(289,600)	(0.15)	696,340	0.37
	At the end of the year	-	-	696,340	0.37
2	M A M Arunachalam				
	At the beginning of the year	1,100,600	0.58		
	Transactions during the year ended 31st March 2019	-	-	-	-
	At the end of the year			1,100,600	0.58
3	K Srinivasan				
	At the beginning of the year	395,530	0.21		
	Transactions during the year ended 31st March 2019	-	-	-	-
	At the end of the year			395,530	0.21

** None of the other Directors and Key Managerial Personnel hold shares in the Company.*

Extract of Annual Return

V. INDEBTEDNESS OF THE COMPANY INCLUDING INTEREST OUTSTANDING/ACCRUED BUT NOT DUE FOR PAYMENT

₹ million

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year				
i) Principal Amount	18.09	-	-	18.09
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	-	-	-	-
Total (i+ii+iii)	**18.09**	**-**	**-**	**18.09**
Change in Indebtedness during the financial year				
• Addition	-	-	-	-
• Reduction	9.13	-	-	9.13
Net Change	**(9.13)**	**-**	**-**	**(9.13)**
Indebtedness at the end of the financial year				
i) Principal Amount	8.96	-	-	8.96
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	-	-	-	-
Total (i+ii+iii)	**8.96**	**-**	**-**	**8.96**

VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

A. Remuneration to Managing Director, Whole-time Directors and/or Manager: Mr. K Srinivasan, Managing Director

₹ million

Sl. no.	Particulars of Remuneration	Total Amount
1	Gross salary (a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	23.16
	(b) Value of perquisites u/s 17(2) of Income-tax Act, 1961	0.05
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961	-
2	Stock Option*	-
3	Sweat Equity	-
4	Commission as % of profit	-
5	Others	-
	Total (A)	23.21
	Ceiling as per the Act	126.54

**The deemed benefit on exercise of Options under the Company's ESOP Scheme 2007 has not been considered as there was no cost to the Company.*

B. Remuneration to other Directors

₹ million

Sl. no.	Particulars of Remuneration	Name of the Director						
1	**Independent Directors**	**T L Palani Kumar**	**Sanjay Jayavarthanavelu**	**Aroon Raman**	**Bharati Rao**	**P S Raghavan**	**Sujjain S Talwar**	**Total**
	Fee for attending Board/ Committee meetings	0.27	0.33	0.29	0.28	0.18	0.28	1.63
	Commission	0.75	0.75	0.75	0.75	0.75	0.75	4.50
	Others	-	-	-	-	-	-	-
	Total(1)	**1.02**	**1.08**	**1.04**	**1.03**	**0.93**	**1.03**	**6.13**
2	**Other Non-Executive Directors**	**M M Murugappan**	**M A M Arunachalam**					**Total**
	Fee for attending Board/ Committee meetings	0.21	0.21					0.42
	Commission	10.00	0.75					10.75
	Others	-	-					
	Total(2)	**10.21**	**0.96**					**11.17**
	Total Managerial Remuneration (B)=(1+2)							**17.30**
	Overall ceiling as per the Act excluding sitting fees							**25.31**

Extract of Annual Return

C. Remuneration To Key Managerial Personnel other than MD/Manager/WTD

₹ million

Sl. no.	Particulars of Remuneration	Key Managerial Personnel			
		CEO	Company Secretary	CFO**	Total
1	Gross salary (a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	NA*	4.42	5.50	9.92
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961		0.02	0.01	0.03
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961		-	-	-
2	Stock Option		-	-	-
3	Sweat Equity		-	-	-
4	Commission - as % of profit - others		-	-	-
5	Others		-	-	-
	Total		**4.44**	**5.51**	**9.95**

** The Company has a Managing Director whose details are provided above in VI A.*

*** Mr.Jagannathan Chakravarthi Narasimhan was appointed as the Chief Financial Officer w.e.f 3rd August 2018.*

VII. Penalties/Punishment/Compounding of Offences against the Company, Directors, other officers in default in respect of provisions of the Companies Act, 2013 - Nil

On behalf of the Board

M M Murugappan

Chairman

Chennai

April 26, 2019

ANNEXURE F

SECRETARIAL AUDIT REPORT

FOR THE FINANCIAL YEAR ENDED 31st MARCH, 2019

[Pursuant to Section 204(1) of the Companies Act, 2013 and Rule No.9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 and Regulation 24A of the SEBI (Listing Obligations and Disclosure Requirements), Regulations, 2015 as amended]

To,

The Members,
Carborundum Universal Limited
Parry House, 43 Moore Street
Chennai - 600001

We have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by **CARBORUNDUM UNIVERSAL LIMITED** [Corporate Identification Number: L29224TN1954PLC000318] (hereinafter called "the Company"). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, We hereby report that in our opinion, the Company has, during the audit period covering the financial year ended on 31st March, 2019 complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and compliance mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on 31st March, 2019 according to the provisions of:

(i) The Companies Act, 2013 (the Act) and the rules made there under;

(ii) The Securities Contracts (Regulation) Act, 1956 ('SCRA') and the rules made there under;

(iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed there under;

(iv) The Company has complied with the applicable provisions of Foreign Exchange Management Act, 1999 and the rules and regulations made there under to the extent of Overseas Direct Investment. There was no Foreign Direct Investment and External Commercial Borrowings during the year under review;

(v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 ('SEBI Act'):-

(a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;

(b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;

(c) During the year under review, the Company has not issued any new securities mandating compliance of the provisions of the Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009 & Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018;

(d) The Employee Stock Option Plan, 2016 approved under the Securities Exchange Board of India (Share Based Employee Benefits) Regulations, 2014 and the Employee Stock Option Scheme, 2007 approved under the Securities Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999;

(e) During the period under review, the Company has neither issued any debentures nor has any outstanding debentures to be redeemed and hence the compliance of the provisions of the Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008 is not applicable;

(f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;

(g) During the year under review, the Company has not delisted its Securities from any of the Stock Exchanges in which it is listed and hence the compliance of the provisions of the Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009 is not applicable; and

(h) The Company has not bought back any shares during the period under review and hence the provisions of compliance of the Securities and Exchange Board of India (Buyback of Securities) Regulations,1998 & Securities and Exchange Board of India (Buyback of Securities) Regulations, 2018 is not applicable;

(vi) We have reviewed the compliance management systems established by the Company for ensuring compliances under the other applicable Acts, Rules, Regulations and Guidelines prescribed under various laws which are applicable to the Company and categorized under the following major heads/ groups:

1. Factories Act, 1948;
2. Labour laws and other incidental laws related to labour and employees appointed by the Company including those on contractual basis as relating to wages, gratuity, prevention of sexual harassment, dispute resolution, welfare, provident fund, insurance, compensation, etc.;
3. Industries (Development & Regulation) Act, 1991;
4. Acts relating to consumer protection including The Competition Act, 2002;
5. Acts and Rules prescribed under prevention and control of pollution;
6. Acts and Rules relating to Environmental protection and energy conservation;
7. Acts and Rules relating to hazardous substances and chemicals;
8. Acts and Rules relating to electricity, fire, petroleum, drugs, motor vehicles, explosives, boilers etc.;
9. Acts relating to mining activities;
10. Acts relating to protection of IPR;
11. The Information Technology Act, 2000;
12. Land revenue laws and
13. Other local laws as applicable to various plants and offices.

We believe that the audit evidence which we have obtained is sufficient and appropriate to provide a basis for our audit opinion. In our opinion and to the best of our information and according to the explanations given to us, we believe that the compliance management system of the Company is adequate to ensure compliance of laws as mentioned above.

With respect to the applicable financial laws such as direct and indirect tax laws, based on the information & explanations provided by the management and officers of the Company and certificates placed before the Board of Directors, we report that adequate systems are in place to monitor and ensure compliance.

We have also examined compliance with the applicable clauses / regulations of the following:

(i) Secretarial Standards with respect to Meetings of Board of Directors (SS-1) and General Meetings (SS-2) issued by The Institute of Company Secretaries of India.

(ii) The Uniform Listing Agreement entered into with BSE Limited and National Stock Exchange of India Limited pursuant to the provisions of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015.

During the period under review the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. mentioned above.

We further report that

The Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors. There is no change in the composition of the Board of Directors during the period under review.

Adequate notice is given to all directors before the schedule of the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance, and a system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting. Notes on agenda which are circulated less than the specified period, the necessary compliances under the Companies Act, 2013 and Secretarial Standards on Board Meetings are complied with.

Based on the verification of the records and minutes, the decisions were carried out with the consent of the Board of Directors / Committee Members and no Director / Member dissented on the decisions taken at such Board / Committee Meetings. Further, in the minutes of the General Meetings the number of votes cast against the resolutions has been recorded.

We further report that based on the review of compliance mechanism established by the Company, we are of the opinion that the management has adequate systems and processes commensurate with its size and operations, to monitor and ensure compliance with all applicable laws, rules, regulations and guidelines.

We further report that the above mentioned Company being a Listed entity this report is also issued pursuant to Regulation 24A of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 as amended and circular No.CIR/CFD/CMD1/27/2019 dated 8th February, 2019 issued by Securities and Exchange Board of India.

We further report that as per the information and explanation provided by the Management, the Company does not have any Material Unlisted Subsidiary (ies) Incorporated in India pursuant to Regulation 16 (c) and 24A of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 during the period under review.

We further report that during the audit period, there were no specific events having major bearing on the Company's affairs in pursuance of above referred laws, rules, regulations, guidelines and standards.

For R.Sridharan & Associates
Company Secretaries

CS R.Sridharan
CP No. 3239
FCS No. 4775
UIN: S2003TN063400

Chennai
April 26, 2019

Corporate Governance Report

[PURSUANT TO SCHEDULE V OF THE SECURITIES AND EXCHANGE BOARD OF INDIA (LISTING OBLIGATIONS AND DISCLOSURE REQUIREMENTS) REGULATIONS, 2015]

Corporate Governance refers to a system of rules, practices and processes by which a company is directed and controlled. It provides the structure through which a company sets its objectives and the framework within which these objectives are pursued in the context of the social, regulatory and market environment.

Governance essentially involves aligning the interests of various stakeholders in a company and encompasses practically every sphere of management, from action plans, internal controls to performance measurement and corporate disclosures. The purpose is to facilitate an effective and prudent management essential for the long term success of a company.

1. CUMI'S CORPORATE GOVERNANCE PHILOSOPHY

Carborundum Universal Limited ("CUMI"), a constituent of the Murugappa Group, is committed to the highest standards of Corporate Governance in all its activities and processes. Key elements in Corporate Governance are transparency, internal controls, risk management, internal/external communications and good standards of safety, health, environment and quality. The Board recognises that governance expectations are constantly evolving and is committed to keeping its governance standards under continuous review to meet both letter and spirit of the law and its own demanding levels of business ethics. CUMI considers Corporate Governance as the cornerstone for sustained superior performance and for serving all its stakeholders. The Company's continuing contribution to the society through meaningful Corporate Social Responsibility initiatives, be it direct initiatives through the CUMI Skill Development Centre or indirect initiatives through contributions to eligible implementing agencies in the core sectors of health & education, plays a significant role in its governance initiatives. The entire process begins with the functioning of the Board of Directors, with leading professionals and experts serving as Independent Directors and representing in various Board Committees.

The Company has always believed in and practices the highest standards of Corporate Governance since its inception and considers that sound governance practices are crucial for its smooth and efficient operations as well as its ability to attract investments, balancing the interests of all its stakeholders and providing shareholder value. The behaviour and ethics of an organisation are considered to be two defining characteristics of any company critical to not only successful leadership but also in ensuring long term sustainability. CUMI's ethical and responsible behaviour complements its corporate culture which is guided by the following norm:

"The fundamental principle of economic activity is that no man you transact with will lose; then you shall not".

The Corporate Governance philosophy of the Company is driven by the fundamental principles of:

- Adhering to the governance standards beyond the letter of law;
- Maintaining transparency and high degree of disclosure levels;
- Maintaining a clear distinction between personal and corporate interest;
- Having a transparent corporate structure driven by business needs; and
- Ensuring compliance with applicable laws.

The Company's constant endeavour for corporate excellence has been well recognised through incessant awards and accolades reiterating its commitment to governance standards. CUMI has been the recipient of the coveted Golden Peacock awards in Corporate Ethics and Corporate Governance in the past few years. During the year 2018-19, the Company has won the prestigious ICAI award for excellence in financial reporting in manufacturing and trading sector (turnover category ₹500 crores - ₹3000 crores). The Company strives making sustainable efforts in recognition for its governance initiatives and processes.

2. BOARD OF DIRECTORS

The Board being aware of its fiduciary role, recognises its responsibilities towards all stakeholders and upholds highest standards of governance in all matters concerning the Company. It has empowered responsible persons to implement its broad policies and guidelines besides setting up adequate review processes.

The Board provides strategic guidance on affairs of the Company in addition to reviewing the performance and monitoring the implementation of plans periodically. The Independent Directors provide an objective judgement on matters placed before them.

The Company's day to day affairs are managed by the Managing Director, assisted by a competent Management team under the overall supervision of the Board. The Company's commitment to ethical and lawful business conduct is a fundamental shared value of the Board, Senior Management and all its employees.

Consistent with its Values and Beliefs represented by the Five Lights - spirit of the Murugappa Group, the Company has formulated a Code of Conduct applicable to the Board and Senior Management which is posted on the website of the Company at *https://www.cumi-murugappa.com/policies.html.* An annual declaration is obtained from every person covered by the Code of Conduct. A declaration to this effect signed by the Managing Director is annexed to this Report. The Board is committed to representing the long-term interests of the stakeholders, providing effective governance over the Company's affairs and exercising reasonable business judgement on the affairs of the Company.

2.1 Composition

The Board has been constituted in an appropriate manner, to preserve its independence and to separate the Board functions of governance and management. The Board members are eminent persons and have collective experience in diverse fields of technology, engineering, banking, foreign affairs, management, legal and compliance. The Directors are nominated based on their qualification and experience in varied fields. The Board has formulated a Board Diversity policy to ensure an optimum composition such that the talent of all members of the Board blend together to be as effective as possible. The Board has an appropriate mix of Executive/Non-Executive as well as Independent Directors including a Woman Director to ensure proper governance and management.

Corporate Governance Report

As at 31st March 2019, the Board comprises 9 members with a majority of them being Independent Directors.

Name	Category	No. of Directorships / (Chairmanships) in companies including CUMI [(a)]	No. of other Directorships	No. of Committee memberships / (Chairmanships) in companies including CUMI [(b)]	No. of Board meetings attended	Attendance at last AGM	Shares held in CUMI
M M Murugappan DIN - 00170478	Promoter & Non-Executive Director	9 (6)	6	5 (3)	6	Yes	696,340
T L Palani Kumar DIN - 00177014	Non-Executive & Independent Director	2	1	1 (1)	5	Yes	Nil
Sanjay Jayavarthanavelu DIN - 00004505	Non-Executive & Independent Director	10 (3)	1	2	6	Yes	Nil
Aroon Raman DIN - 00201205	Non-Executive & Independent Director	4	3	3	6	Yes	Nil
Bharati Rao DIN - 01892516	Non-Executive & Independent Director	9	-	10 (1)	6	Yes	Nil
M A M Arunachalam DIN - 00202958	Promoter & Non-Executive Director	4	3	3 (1)	6	Yes	1,100,600
P S Raghavan DIN - 07812320	Non-Executive & Independent Director	1	1	1	5	Yes	Nil
Sujjain S Talwar DIN - 01756539	Non-Executive & Independent Director	1	4	1	6	Yes	Nil
K Srinivasan DIN - 00088424	Managing Director	4 (1)	6	3 (1)	6	Yes	395,530

(a) Excluding Alternate Directorships and Directorships in Foreign companies, Private companies (which are not subsidiary or holding company of a Public company) and Section 8 companies;

(b) Only Audit & Stakeholders Relationship Committee of Public companies;

(c) Inter-se relationship between Directors - Nil;

(d) Shareholding of Directors represents the shares held by them in individual capacity and excludes shares held as Trustees;

The names of listed entities where the Directors hold directorship (excluding the Company) is given below:

Name of the Director	Name of the entity	Category
M M Murugappan	Tube Investments of India Limited	Non-Executive Director & Non-Independent Chairman
	Cholamandalam Investment and Finance Company Limited	
	Cholamandalam Financial Holdings Limited (Formerly known as TI Financial Holdings Limited)	
	Cholamandalam MS General Insurance Company Limited (Debt Listed)	
	Coromandel International Limited	
	Mahindra and Mahindra Limited	Independent Director
	Cyient Limited	Non-Executive & Non-Independent Director
T L Palani Kumar	-	-
Sanjay Jayavarthanavelu	Lakshmi Machine Works Limited	Chairman and Managing Director
	Super Sales India Limited	Non-Executive & Non-Independent Chairman
	The Lakshmi Mills Company Limited	
	Lakshmi Electrical Control Systems Limited	
Aroon Raman	Wheels India Limited	Independent Director
	Brigade Enterprises Limited	
Bharati Rao	Cholamandalam Investment and Finance Company Limited	Independent Director
	Neuland Laboratories Limited	
	Can Fin Homes Limited	
M A M Arunachalam	Coromandel Engineering Company Limited	Non-Executive and Non-Independent Director
P S Raghavan	-	-
Sujjain S Talwar	-	-
K Srinivasan	Wendt (India) Limited	Non-Executive Director

There were no changes in the composition of the Board during the year 2018-19.

The Company has received the requisite declarations from its Independent Directors confirming that they meet the criteria of independence prescribed both under the Companies Act, 2013 and the Listing Regulations. The Board at its meeting held on 26th April 2019 has taken on record the declarations received from the Independent Directors. In the opinion of the Board, the Independent Directors of the Company fulfil the conditions specified in the Listing Regulations and are independent of the Management.

The Company is a material science technology company and hence presence of technical expertise in engineering and technology in the Board to guide the Company in its operations and strategy assumes significance. Considering the nature of the business the Company operates in and its global presence, the Board is required to possess various other skills/expertise in the field of foreign affairs, finance, legal, compliance and management. The Directors are nominated based on their qualification and experience in order to maintain a healthy balance of diversified experts on the Board.

The matrix setting out the skills/expertise/competence of the Board of Directors listing the core skills/expertise/competencies identified by the Board as required in the context of its business(es) and sector(s) for it to function effectively and those available with the Board is given below:

Key Skills & competencies	Description
Technology	Understanding and appreciation of technology either through qualification or experience resulting in understanding the products manufactured by the Company/solutions provided by the Company, anticipated technological trends, ability to articulate on disruptive innovations, understand and guide in creation of new business models etc.
Financial	Leadership or Management positions or qualifications enabling proficiency in understanding financial management, capital allocation, financial reporting process, audit processes, internal controls, understanding of treasury management, debt management, advising on leveraging banking relationships etc.
Global business/Foreign affairs	Experience in cross border business environment, understanding of foreign policies and external affairs, sanctions regime, diverse business environment/cultures/regulatory framework and having a perspective of global opportunities etc.
Board positions/Governance	Directorship positions or experience with Regulatory interfaces and having an insight into Board processes, structures, committee constitutions, protecting stakeholder interests, aligning with appropriate governance practices etc.
Management	Leadership positions in enterprises by virtue of which has requisite experience in management skills or functional expertise across various management functions, guiding strategies for sustainable growth enhancing enterprise reputation etc.
Strategic advisory	Ability to advise on organic/inorganic growth opportunities through acquisitions/combinations, assess build or purchase proposals, appreciative of and understanding of the regulatory and legal requirements of the sector/ industry in which the Company operates in.

2.2 Board Meetings

The Board meets at regular intervals and has a formal schedule of matters reserved for its consideration and decision to ensure that it exercises full control over significant, strategic, financial, operational and compliance matters. These include setting performance targets, reviewing operational and financial performance against set targets, evolving strategy, approving investments, ensuring adequate availability of financial resources, overseeing risk management and reporting to the shareholders.

The Board is regularly briefed and updated on key business activities and is provided with presentations and information on the operations, financial performance and other matters concerning the Company. Besides, information on statutory compliance of applicable laws, minutes of meetings of the Committees of the Board, summary of decisions taken at the Board meetings of the subsidiary companies and information required under the Listing Regulations are provided to the Board on a quarterly basis. The Board periodically reviews the compliance of applicable laws and gives appropriate directions, wherever necessary. Timely and relevant information is provided by the Company to the Directors to facilitate effective participation and contribution during the meetings.

The Company has laid down procedures to inform the Board members about the risk assessment and minimisation procedures. The Board reviews the significant business risks identified by the Management and the mitigation process being undertaken.

The Board periodically reviews the matters required to be placed before it, monitors the overall performance of the Company and inter alia reviews and approves the quarterly financial statements, business plan, capital expenditure etc. The dates of the Board meetings are fixed in advance for the full calendar year to enable maximum attendance from the Board members. During the year ended 31st March 2019, six Board meetings were held on 4th May 2018, 3rd August 2018, 29th October 2018, 31st January 2019, 1st February 2019 and 18th March 2019. As required under the Companies Act, 2013, the Company facilitates participation of a Director who is unable to attend the Board/Committee meetings physically, through video conference or other audio visual means in the manner prescribed under the relevant regulations.

In line with the amended Regulation 24 of the Listing Regulations requiring at least one Independent Director of the Company to be a Director on the Board of an unlisted material subsidiary, whether incorporated in India or not, effective 1st April 2019, Mr. P S Raghavan, Independent Director was nominated to the Board of Volzhsky Abrasives Works, Russia and was inducted into its Board on

28th November 2018. For the purposes of this requirement, a material subsidiary means any subsidiary whose networth exceeds 20% of the consolidated net worth of the Company or which has generated more than 20% of the consolidated income of the Company in the preceding financial year. Volzhsky Abrasives Works, Russia and CUMI International Limited, Cyprus the Company's subsidiaries are the only entities meeting the requisite criteria mandating a Board representation. Mr. P S Raghavan has been nominated to the Board of CUMI International Limited and is in the process of being inducted therein. The Board reviews the significant transactions and arrangements of the unlisted subsidiary companies besides being apprised of their business plan and performance.

In line with the amendments to the Companies Act, 2013 and Listing Regulations, the Board had reviewed the following existing policies which were duly amended during the year:

- Policy on dealing with Related Parties and materiality of related party transactions
- Code of Conduct for Directors and Senior Management
- Remuneration Policy
- Whistle Blower Policy
- Criteria for Senior Management
- Policy on determination of material subsidiaries
- Code of Conduct to regulate, monitor and report Trading by Designated Persons in Securities of Carborundum Universal Limited
- Code for Practices and Procedures for Fair Disclosure of Unpublished Price Sensitive Information (UPSI)

The above mentioned policies are posted on the website of the Company at the link *https://www.cumi-murugappa.com/policies.html.*

The Company also has in place policies for determining materiality for disclosure of events/information to stock exchanges, preservation and archival of documents, dividend distribution, business responsibility and prevention of sexual harassment at workplace. These policies are periodically reviewed by the Board. During the year, the Company has put in place a policy for determining legitimate purposes for which Unpublished Price Sensitive Information could be shared on need to know basis as well the procedure for conduct of inquiry into leak or suspected leakage of UPSI.

2.3 Separate Meeting of Independent Directors

Besides the formal Board meetings, the Independent Directors hold meetings without the participation of Non-Independent Directors and members of the Management. During the year, the Independent Directors met on 18th March 2019 and reviewed the performance of Non-Independent Directors and the Board as a whole, reviewed the performance of the Chairman taking into account views of the Executive and Non-Executive Directors and also assessed the quality, quantity and timeliness of flow of information between the Management and the Board.

2.4 Board familiarisation

The members of the Board are provided with many opportunities to familiarise themselves with the Company, its Management and operations. At the time of appointing a Director, a formal letter of appointment is given to him/her, along with a Directors' handbook which inter alia explains the role, function, duties and responsibilities expected of him/her as a Director of the Company. The handbook also enumerates the list of compliance obligations and other disclosures required from the Director under the Companies Act, Listing Regulations and other relevant regulations. Newly inducted Audit Committee members are provided with an Audit Committee manual which broadly covers the regulatory scenario in India, current practices in the Company, Indian and global best practices etc. These handbooks are updated periodically for regulatory as well as policy changes and updated copies of the handbooks are provided to all the Directors. Further, the Code of Conduct which includes the values, principles and beliefs guiding the Company and the duties and responsibilities of the Directors including that of an Independent Director is given to the Director at the time of induction which is affirmed annually. In addition, the Board members have opportunity and access to interact with the Senior Management at any time they wish to.

By way of an introduction to the Company, the newly inducted Director is presented with a corporate dossier which traces the Company's history over 60 years of its existence and gives a glimpse of value chain of its products. The Managing Director at the first Board meeting in which the new Director participates or at a mutually convenient time makes a detailed presentation on the Company, its various business segments and profile, manufacturing locations, organisation structure and other market related information. Exclusive plant visits are also organised for the new Director. Further, with a view to familiarise the existing Directors with the Company's operations on an ongoing basis, plant visits are periodically organised for the Directors. During the year, a visit of the facilities of the Company at Sriperumbudur and Maraimalai Nagar, Tamil Nadu was undertaken by the Board members on 31st January 2019. Further, Mr. M A M Arunachalam visited the Sriperumbudur facility on 24th April 2018 and had interactions with the operating team. In the backdrop of a dynamic regulatory scenario, regulatory changes impacting the Company is briefed at meetings on quarterly basis. Annually, a dedicated meeting of the Board for business plan/strategy discussion is held, usually at the plant locations of the Company. Further, the Board is also regularly updated on the technological initiatives undertaken in businesses.

The above initiatives help the Directors to understand the Company, its businesses and the regulatory framework in which the Company operates, thus enabling him/her to effectively fulfil their role as a Director of the Company. The details of the familiarisation programme is also uploaded and is available on the Company's website at the following link *https://www.cumi-murugappa.com/policies.html.*

2.5 Board evaluation

During the year, the Board conducted an evaluation of its own performance, individual Directors as well as the working of the Committees as per the Board evaluation framework adopted by it. The manner and criteria for the evaluation of the Directors including the Independent Directors of the Company is detailed in the Directors' Report.

3. BOARD COMMITTEES

The Board has constituted various Committees for support in discharging its responsibilities. There are five Committees constituted by the Board - Audit Committee, Nomination and Remuneration Committee, Risk Management Committee, Stakeholders Relationship Committee and Corporate Social Responsibility Committee. The Company Secretary acts as the Secretary to the Committees of the Board.

The Board at the time of constitution of each Committee determines the terms of reference and also delegates further powers from time to time. Various recommendations of the Committees are submitted to the Board for consideration & approval and the minutes of all meetings of the Committees are circulated to the Board for information.

In addition to the above, the Board from time to time constitutes committees of Directors for specific purposes. During the year, no meetings of such Committees were held.

3.1 Audit Committee

Terms of Reference

The role of the Audit Committee includes overseeing the financial reporting process and disclosure of financial information, review of financial statements before submission to the Board, review of adequacy of internal control system, findings of internal audit, whistle blower mechanism, related party transactions, scrutiny of inter-corporate loans & investments, approval and review of related party transactions, valuation of assets/undertakings of the Company, appointment of registered valuers etc., besides recommending the appointment of Auditors and their remuneration to the Board as well as approval of payments to Statutory Auditors for non-audit services and review of effectiveness of audit process. The Audit Committee also reviews the financial statements of unlisted subsidiary companies, in particular, the investments made by them.

In line with the revised requirements laid in the amended Listing Regulations, the Board during the year reviewed and revised the terms of reference of the Audit Committee to include review of utilisation of loans and/ or advances from/investments made in the subsidiaries as well as review of compliance with the provisions of SEBI (Prohibition of Insider Trading) Regulations, 2015.

Composition & Meetings

The Audit Committee comprises entirely Independent Directors and all members of the Committee are financially literate. The Chairman of the Board, the Statutory Auditor, Internal Auditor and members of the Management Committee are invited to attend all meetings of the Committee. The Cost Auditor is invited to attend meetings in which the Cost Audit Report is being considered. Further, as a good Corporate Governance practice, a separate discussion of the Committee with the Statutory Auditors and the Internal Auditors without the presence of the Management team is held periodically.

During the year, the Committee had five meetings on 4th May 2018, 3rd August 2018, 29th October 2018, 1st February 2019 and 18th March 2019 for reviewing the financial statements and considering the internal audit reports and audit plan. The composition of the Committee and attendance of the members at the meetings held during the year are given below:

Name of Member	No. of meetings attended (No. of meetings held)
T L Palani Kumar (Chairman)	4 (5)
Sanjay Jayavarthanavelu	5 (5)
Bharati Rao	5 (5)
Sujjain S Talwar	5 (5)

3.2 Nomination and Remuneration Committee

Terms of Reference

The role of the Committee is to (a) recommend to the Board the appointment of Directors (b) recommend re-election of Directors retiring by rotation (c) recommend the remuneration including pension rights and periodic increments of the Managing/Wholetime Director(s) (d) determine the annual incentive of the Managing/Wholetime Director(s) (e) recommend to the Board, the commission payable annually to each of the Non-Wholetime Directors, within the limits fixed by shareholders (f) formulate, implement, administer and superintend the Employee Stock Option Plan/Scheme(s) of the Company (g) formulating criteria for appointment of Directors and Senior Management and identification of persons who may be qualified to be appointed in these positions (h) devise policy on Board diversity (i) formulate criteria for evaluation of Independent Directors/Board, evaluation of the Directors' performance (j) recommend Remuneration policy to the Board (k) ensuring Board Diversity etc.

In line with the amendments to the Listing Regulations, the Board during the year, reviewed and revised its terms of reference to include recommendations of the appointment and remuneration payable to Senior Management to the Board.

The Committee has formulated the criteria for determining the qualifications, positive attributes and independence of a Director as well as the criteria for Senior Management positions in terms of Section178(3) of the Companies Act, 2013 besides laying down the criteria for Board evaluation. The Board evaluation including that of the Independent Directors is done based on the evaluation frame work detailed elsewhere in the Directors' Report. The Company also has in place a Board approved policy on the remuneration for Directors, Key Managerial Personnel and other employees which was reviewed during the year in line with the Listing Regulations and adopted by the Board. The policy is available in the link *https://www.cumi-murugappa.com/policies.html.*

Board Diversity Policy

The Company recognises and embraces the benefits of having a diverse Board and the Board diversity policy sets out the approach in this regard. A truly diverse Board comprising of appropriately qualified people with a broad range of experience relevant to the business of the Company, is integral to its success and is also an essential element in maintaining a competitive advantage on a sustainable basis. In line with the policy, the Board is balanced by members having complementary knowledge, expertise and skills in areas such as business strategy, finance, foreign affairs, legal, marketing, manufacturing, technology etc. that the Board considers desirable.

Criteria for Board Nomination

The Nomination and Remuneration Committee is responsible for identifying persons for nomination as Directors as well as evaluating incumbent Directors for their continued service. The Committee has formulated a criteria in terms of Section 178 of the Companies Act, 2013 and the Listing Regulations inter alia detailing the qualifications in terms of personal traits, experience & background, fit & proper, positive attributes and independence standards to be considered for nominating candidates for Board positions/ re-appointment of Directors.

Criteria for Senior Management

The Nomination and Remuneration Committee is also responsible for identifying persons who are qualified to be appointed in Senior Management positions. The Committee has formulated a criteria in terms of personal traits, competencies, experience & background etc. to be considered for nominating candidates to Senior Management positions.

Composition & Meetings

The Committee comprises of three members with all of them being Independent Directors.

The Committee met on four occasions during the year - 4th May 2018, 3rd August 2018, 29th October 2018 and 18th March 2019. The composition of the Committee and attendance of members are given below:

Name of Member	No. of meetings attended (No. of meetings held)
T L Palani Kumar (Chairman)	3(4)
Sanjay Jayavarthanavelu	4(4)
Aroon Raman	4(4)

3.3 Risk Management Committee

Terms of Reference

The Board has constituted a Risk Management Committee for monitoring the risk management process in the Company. The role of this Committee is to review the annual risk management framework to ensure that it is comprehensive & well developed, to periodically review the process for systematic identification and assessment of the business risks, to assess the critical risk exposures by specialised analysis and quality reviews and report to the Board the details of any significant development relating to these including the steps being taken to manage the exposures, identify and make recommendations to the Board, to the extent necessary on resources and staffing required for an effective risk management.

In line with the Listing Regulations, the Board revised the terms of reference of the Risk Management Committee to include the review of risks associated with cyber security.

The Committee has formulated a risk management policy with the following key objectives:

- Strengthening the business performance by informed decision making and planning.
- Adding sustainability value to the activities of the Company.
- Enhancing risk awareness amongst employees.
- Having in place an early warning mechanism for identification of threats/opportunities.
- Enabling optimum resources allocation and efficient use.
- Promoting an innovative culture with proper understanding of risks.

During the year, the Committee reviewed the Company's organisational resilience vis-à-vis the British Standard on Organisational Resilience and made an internal assessment of its maturity levels. Further, the Committee had also reviewed the risk registers prepared by the Company in line with the risk management policy of the Company in respect of its businesses and certain major functions.

Composition & Meetings

The Committee comprises two Independent Directors and the Managing Director. The Management Committee members comprising the Senior Management executives are invited to the meetings.

The Committee met on two occasions during the year on 29th October 2018 and 18th March 2019. The composition of the Committee and attendance of members are given below:

Name of Member	No of meetings attended (No. of meetings held)
P S Raghavan (Chairman)	2 (2)
Aroon Raman	2 (2)
K Srinivasan	2 (2)

3.4. Stakeholders Relationship Committee

Terms of Reference

The terms of reference of this Committee includes formulation of investor servicing policies, review of redressal of investor complaints and approval/overseeing of transfers, transmissions, transpositions, splitting, consolidation of securities, issue of certificates, demat/remat requests, finalisation of terms of issue of debt instruments including debentures, approval of their allotment, administering the unclaimed shares suspense account, authorising the terms of various borrowings & creating security in respect there of, allotment of shares on exercise of Options by employees under the Employees Stock Option Scheme/Plan and performing other functions as delegated to it by the Board from time to time.

In line with the regulatory amendments in the Listing Regulations, the Board, during the year, revised the terms of reference of the Stakeholders Relationship Committee to specifically include (a) review of service standards in respect of various services rendered by the Registrar & Share Transfer Agent (b) to consider and resolve the grievances of security holders of the Company and to determine, monitor and review the standards for resolution of stakeholders grievance (c) review measures taken for effective exercise of voting rights by shareholders (d) review of various measures and initiatives taken for reducing the quantum of unclaimed dividends and ensuring timely receipt of dividend warrants/ annual reports/statutory notices by the shareholders.

Composition & Meetings

During the year, the Stakeholders Relationship Committee was re-constituted by the Board with the induction of Mr. P S Raghavan, an Independent Director as a member on 18th March 2019.

The Committee met on four occasions during the year 4th May 2018, 3rd August 2018, 29th October 2018 and 1st February 2019.

The composition of the Committee and attendance of members are given below:

Name of Member	No of meetings attended (No. of meetings held)*
M M Murugappan (Chairman)	4 (4)
M A M Arunachalam	4 (4)
K Srinivasan	4 (4)
P S Raghavan	-

* *Number of meetings held during tenure of membership in the Committee*

There were five investor service complaints received during the year. Out of the five complaints received, two complaints pertained to dematerialisation of shares, one was with respect to procedure for issue of duplicate share certificates and the remaining two pertained to transmission of shares. All the complaints received were resolved to the satisfaction of the shareholders. There were no investor service complaints pending as at 31st March 2019.

Ms. Rekha Surendhiran, Company Secretary continues to be the Compliance Officer for the purpose of compliance with the requirements of the Listing Regulations.

By virtue of an Order passed by the Hyderabad Bench of the National Company Law Tribunal (NCLT Order) approving the composite scheme of arrangement and amalgamation between M/s. Karvy Consultants Limited (demerged company), M/s. Karvy Computershare Private Limited (transferor company) and M/s. Karvy Fintech Private Limited (resulting company), the operations of Karvy Computershare Private Limited have been transferred to Karvy Fintech Private Limited with effect from 17th November 2018. Karvy Fintech Private Limited, Hyderabad, is the Company's Registrar and Share Transfer Agent (RTA). The contact details are available in the General Shareholder Information section of the Report.

3.5 Corporate Social Responsibility Committee

Terms of Reference

The Board has constituted a Corporate Social Responsibility (CSR) Committee in line with the requirements of the Companies Act, 2013 for assisting the Board in discharging its corporate social responsibility. The Board has approved a CSR policy formulated and recommended by the Committee which is uploaded and available on the Company's website at the following link *https://www.cumi-murugappa.com/policies.html.* The functions of the Committee inter alia include recommending the amount of expenditure to be incurred on the CSR activities during the year, monitoring the implementation of CSR activities as per the CSR policy of the Company from time to time.

Composition & Meetings

The Committee comprises two Independent Directors and the Managing Director as its members. The Management Committee members are invited to the meetings. The Committee met on three occasions during the year on 4th May 2018, 29th October 2018 and 1st February 2019.

The composition of the Committee and attendance of members are as follows:

Name of Member	No. of meetings attended (No. of meetings held)
Aroon Raman	3 (3)
P S Raghavan	2 (3)
K Srinivasan	3 (3)

4. DIRECTORS' REMUNERATION

4.1 Policy

The ability to attract and retain talented and quality resources is a significant characteristic of any successful organisation. The Company's Remuneration policy formulated by the Nomination and Remuneration Committee provides the framework for remuneration of the Board members as well as all employees including the Key Managerial Personnel and Senior Management. This policy is guided by the principles and objectives enumerated in Section 178 of the Companies Act, 2013 and the Listing Regulations to ensure reasonableness and sufficiency of remuneration to attract, retain and motivate competent resources, establish a clear relationship of remuneration to performance and a balance between rewarding short and long-term performance.

The compensation of the Managing Director comprises a fixed component and a performance incentive based on certain pre-agreed parameters. The compensation is determined based on levels of responsibility and scales prevailing in the industry. The Managing Director is not paid sitting fees for any Board/Committee meetings attended by him. The Managing Director is also eligible for employee Stock Options. Equity based compensation is considered to be an integral part of employee compensation across various sectors which enables alignment of personal goals of employees with organisational objectives. The summary of the Stock Options granted earlier to the Managing Director is given in this report. No fresh grants were made to him under the ESOP Scheme 2007 or ESOP 2016 during the year.

The compensation to the Non-Executive Directors takes the form of commission on profit. Though shareholders have approved payment of commission up to one per cent of net profit of the Company for each year, the actual commission paid to the Directors is restricted to a fixed sum within the above limit. This sum is reviewed periodically taking into consideration various factors such as performance of the Company, time spent by the Directors for attending to the affairs and business of the Company and extent of responsibilities cast on Directors under general laws and other relevant factors.

In keeping with the evolving trends in industry, the practice of paying differential commission to Directors based on the time and efforts spent by them has also been adopted. Given the size and nature of its operations and also the rich experience that Mr. M M Murugappan possesses in the field of engineering, a considerable amount of time is spent by him in connection with the operations of the Company. Apart from playing an active role in guiding and advising on matters connected with strategy and management, he spends considerable time on developing/managing relationships with the Company's business partners both in India and overseas. The Chairman also plays an active role in matters connected with CUMI's organisation culture which is critical for the Company to deliver superior performance besides devoting time for technology related issues impacting the Company. Further, the Chairman spends a lot of time participating in various events, conclaves and functions of Industry bodies, Academic Institutions and interactions with high level State Authorities in India and globally representing the Company. Under his chairmanship, the Company has grown globally from ₹4060 million to over ₹23000 million.

The Non-Executive Directors are also paid sitting fees within the limits prescribed under the Companies Act, 2013 for every Board/Committee meeting attended by them.

4.2 Remuneration for FY 2018-19

Non-Executive Directors ₹ million

Name	Sitting Fees	Commission @
M M Murugappan	0.21	10.00
T L Palani Kumar	0.27	0.75
Sanjay Jayavarthanavelu	0.33	0.75
Aroon Raman	0.29	0.75
Bharati Rao	0.28	0.75
M A M Arunachalam	0.21	0.75
P S Raghavan	0.18	0.75
Sujjain S Talwar	0.28	0.75
Total	**2.05**	**15.25**

@ will be paid after adoption of accounts by shareholders at the 65th Annual General Meeting.

Managing Director ₹ million

Name	K Srinivasan	Amount
Fixed Component	Salary & Allowances	14.13
	Retirement benefits*	3.59
	Perquisites	0.05
Variable Component	Incentive	5.44

*includes contribution to National Pension System of PFRDA.

(a) Mr. K Srinivasan, Managing Director voluntarily did not take any increment during the FY 2018-19.

(b) Represents incentive paid during the financial year 2018-19 in respect of the financial year 2017-18.

(c) As per the terms of his remuneration, the Managing Director is eligible for an annual incentive based on a balanced score card which comprises Company financials, Company scorecard and personal objectives. For the financial year 2018-19, a sum of ₹5.89 million has been provided in the accounts for this purpose. The actual amount will be decided by the Nomination and Remuneration Committee in July 2019.

(d) No employee Stock Options (ESOP) were granted to Mr. K Srinivasan under the Employee Stock Option Scheme, 2007 (grants discontinued since February 2012) and Employee Stock Option Plan, 2016 during the year. As on 31st March 2019, there are no outstanding Options granted to Mr. K Srinivasan, Managing Director.

In respect of ESOPs granted to Mr. K Srinivasan under the Employees Stock Option Scheme, 2007, the Options are accounted based on fair value, as prescribed by the Indian Accounting Standards (IND AS). As required under the Listing Regulations, details of the Options earlier granted to Mr. K Srinivasan under Company's ESOP Scheme 2007 are given below:

Particulars	No. of Options	Exercise price
Options granted	443,800	₹91.80/- being the market price prior to the date of grant
Options vested	443,800	
Options cancelled	66,570	
Options lapsed	-	
Options exercised	377,230	
Options outstanding	-	

Further, the 370,400 stock options granted to Mr. K Srinivasan during the FY 2017-18 under the ESOP 2016 has been surrendered by him with an intention to make the same available for other eligible employees of the Company at an appropriate time.

5. GENERAL BODY MEETINGS

5.1 Last three Annual General Meetings

Financial Year	Date	Time	Venue
2015-2016	03.08.2016	3.00 PM	TTK Auditorium, Music Academy, 168 (Old No. 306) TTK Road, Royapettah, Chennai 600014
2016-2017	31.07.2017		
2017-2018	03.08.2018		

5.2 Special Resolutions passed during the last three Annual General Meetings

Sl. No.	Item of business	Passed on
1.	Approval of offer/invitation to subscribe to Non-Convertible Debentures up to ₹2500 million on Private Placement basis.	03.08.2016
2.	Approval of offer/invitation to subscribe to Non-Convertible Debentures up to ₹2500 million on Private Placement basis.	31.07.2017
3.	Approval of remuneration by way of commission payable to Non-Executive Directors of the Company for a period of five financial years.	03.08.2018
4.	Approval of offer/invitation to subscribe to Non-Convertible Debentures up to ₹2500 million on Private Placement basis.	03.08.2018

5.3 Postal Ballot

During the year, there were no resolutions passed through postal ballot and as at the year end, there are no proposals to pass special resolutions through postal ballot except those requiring to be passed pursuant to the Companies Act, 2013/Listing Regulations which will be done after providing adequate notice to the shareholders.

6. WHISTLE BLOWER POLICY/VIGIL MECHANISM

The Company has established a whistle blower mechanism to provide an avenue to raise concerns, if any, in line with the Company's commitment to the high standards of ethical, moral and legal conduct of business. The mechanism also provides for adequate safeguards against victimisation of employees who avail of the mechanism and also for appointment of an Ombudsperson who will deal with the complaints received. The policy also lays down the process to be followed for dealing with complaints and in exceptional cases, also provides for direct appeal to the Chairperson of the Audit Committee. In line with the requirements of the Companies Act, 2013, the policy coverage extends to the Directors of the Company and the Ombudsman for dealing with any referrals made by Board members is the Chairman of the Audit Committee. During the year, in line with the SEBI (Prohibition of Insider Trading) Regulations, 2015, the Board had reviewed the Whistle Blower policy to include reporting of instances that may result in leakage of Unpublished Price Sensitive Information (UPSI). The Whistle blower policy is available on the Company's website at the following link *https://www.cumi-murugappa.com/policies.html.* It is affirmed that during the year, no employee was denied access to the Audit Committee.

7. PREVENTION OF INSIDER TRADING

The Company has adopted a Code of Conduct for Prevention of Insider Trading with a view to regulate trading in securities by the Directors, Promoters and designated employees of the Company. The Code requires pre-clearance for dealing in the Company's shares for all transactions by Directors, Promoters and designated employees (together called Designated Persons) and prohibits the purchase or sale of Company's securities by Designated Persons while in possession of Unpublished Price Sensitive Information in relation to the Company. Further, trading in securities is also prohibited for Designated Persons during the period when the Trading Window is closed. During the year, the Board reviewed the Code in line with the amendments made to the SEBI (Prohibition of Insider Trading) Regulations, 2015 in January 2019. The Board has also formulated a policy containing procedures for conduct of inquiry in case of leakage of UPSI or suspected leakage of UPSI as a part of the Code. The Board further reviewed the Company's Code for practices and procedures for fair disclosure of Unpublished Price Sensitive Information and has also framed a policy for determination of legitimate purposesfor sharing information under the Code. The Company Secretary is responsible for implementation of the Code. The Company has in place an online system for monitoring the compliance of the Code by its designated employees.

8. DISCLOSURES

During the year, there were no material transactions with Related Parties. The Company has devised a policy on dealing with Related Party Transactions and the same is available in the website of the Company in the link *https://www.cumi-murugappa.com/policies.html.* The requirements of Regulation 17 to Regulation 27 of the Listing Regulations and clauses (b) to (i) of Regulation 46(2) to the extent applicable to the Company have been complied with as disclosed in this Report. Further, there were no instances of non-compliance by the Company nor were there any penalties or strictures imposed on the Company by the stock exchanges, SEBI or any statutory authority on any matter related to capital markets in the preceding three years. The disclosures in relation to Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 forms part of the Board's report.

8.1 Disclosure relating to fee paid to Statutory Auditors

During the year, the Company and its subsidiaries have made the following payments to M/s. Price Waterhouse Chartered Accountants LLP, Statutory Auditors and all entities in the network firm/network entity of which the Statutory Auditor is a part. The Company has relied on the information furnished by the Statutory Auditors in respect of the firms/entities covered under network firm/network entity of which the Statutory Auditor is a part.

PWC/ Network firm	Nature of service	Name of the Company	Amount
Price Waterhouse Coopers Limited	Finance Consulting	Foskor Zirconia Pty. Ltd.	35,280 Rand
Price Waterhouse Coopers Private Limited	Professional services availed	Net Access India Limited	₹0.25 Million
Price Waterhouse Chartered Accountants LLP	Statutory Audit	Carborundum Universal Limited	₹3.2 Million
Price Waterhouse Chartered Accountants LLP	Tax Audit		₹0.8 Million
Price Waterhouse Chartered Accountants LLP	Other certification		₹2.35 Million

Payment in respect of non-audit services provided by the Statutory Auditors to the Company are made only with the approval of the Audit Committee as required under Section 144 of the Companies Act, 2013.

8.2 Disclosure of Commodity Price Risks/Foreign Exchange Risks & Hedging Activities

The commodity price risks/foreign exchange risks and the risk management strategy thereof is detailed in the Board's report. The Company does not have any exposure hedged through commodities and hence in terms of Regulation 34(3) read with clause 9(n) of Part C of Schedule V of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 does not arise.

8.3 Disclosure on Credit Ratings

During the year, no credit ratings were obtained by the Company nor were there any revisions. The disclosures relating to reaffirmation of the existing ratings in respect of the borrowings of the Company forms part of the Board's Report.

9. MEANS OF COMMUNICATION

Your Company recognises the significance of dissemination of timely and relevant information to shareholders. In order to enable the stakeholders to understand the financial results in a meaningful manner, the Company gives a press release along with the publication of quarterly/ annual financial results. The quarterly unaudited financial results and the annual audited financial results are normally published in Business Standard (in English) and Makkal Kural (in Tamil). Press releases are given to all important dailies. The financial results, press releases and presentations made to institutional investors/analysts are posted on the Company's website i.e. *https://www.cumi-murugappa.com.*

10. MANAGEMENT DISCUSSION & ANALYSIS

In order to avoid duplication and overlap between the Directors Report and a separate Management Discussion & Analysis (MD&A), the information required to be provided in the MD&A has been given in the Directors' Report itself as permitted by the Listing Regulations.

11. NON-MANDATORY REQUIREMENTS

The quarterly financial results are published in leading financial newspapers, uploaded on the Company's website, and any major developments are conveyed in the press releases issued by the Company and posted on the Company's website. The Company therefore did not send the half yearly performance update individually to the shareholders during the year.

The expenses incurred by the Chairman in performance of his duties are reimbursed.

During the year, the Internal Auditor/Statutory Auditor have had separate discussions with the Audit Committee without the presence of the Management team.

Further, the Financial Statements have an unmodified opinion by the Company's Auditors.

The Internal Auditor reports directly to the Audit Committee for the purpose of audit conducted by him/her. Other non-mandatory requirements have not been adopted at present.

12. CEO/CFO CERTIFICATION

Mr. K Srinivasan, Managing Director and Mr. Jagannathan Chakravarthi Narasimhan, Chief Financial Officer have given a certificate to the Board on matters relating to financial reporting, compliance with relevant statutes and adequacy of internal control systems as contemplated in Regulation 17(8) read with Part B of Schedule II of the Listing Regulations.

13. PRACTISING COMPANY SECRETARY'S CERTIFICATE ON CORPORATE GOVERNANCE

A certificate from M/s. R Sridharan & Associates, Practising Company Secretaries, Chennai on compliance with Corporate Governance requirements is annexed.

14. PRACTISING COMPANY SECRETARY'S CERTIFICATE ON THE DIRECTOR'S DISQUALIFICATION

A certificate from M/s. R Sridharan & Associates, Practising Company Secretaries, Chennai confirming that none of the Directors of the Company have been debarred or disqualified from being appointed or continuing as Directors by the Securities and Exchange Board of India / Ministry of Corporate Affairs or any such statutory authority is annexed and forms part of this Report.

15. GENERAL SHAREHOLDER INFORMATION

A separate section in this regard is annexed and forms part of this Report.

16. SHAREHOLDERS SATISFACTION SURVEY

An online survey is posted on the Company's website at the following link *https://www.cumi-murugappa.com/survey/index.php.*

Shareholders who have not yet submitted the survey can go to the above link and take part in the survey. We request the shareholders who have not yet participated in the survey to use this link and provide us their valuable feedback.

17. INSTRUCTIONS TO SHAREHOLDERS

Shareholders holding shares in physical form are requested to address their communications regarding change in address/contact details by quoting their folio number to the Company's Registrars and Share Transfer Agent (RTA) or to the Company by e-mailing to investorservices@cumi.murugappa.com. Shareholders holding shares in electronic form may send the communications regarding the above to their Depository Participant.

Shareholders are encouraged to avail nomination facility and approach the RTA or their Depository Participant in this regard.

Shareholders are requested to register their e-mail ID with the RTA/ Depository Participant to enable the Company to send communications electronically.

Members are advised to intimate the details of their PAN and bank account details to enable electronic remittance of dividend or alternatively for being incorporated in the dividend warrants. This would help to avoid fraudulent encashment of dividend warrants.

In case of members holding shares in physical form, all intimations are to be sent to Karvy Fintech Private Limited, (Unit: Carborundum Universal Limited), Karvy Selenium Tower B, Plot 31-32, Financial District, Nanakramguda, Serilingampally Mandal, Hyderabad - 500 032 the RTA of the Company.

Members may note that pursuant to SEBI (Listing Obligations and Disclosure Requirements) (Fourth Amendment) Regulations, 2018 effective 1st April 2019, requests for effecting transfer of securities in physical form shall not be processed unless the securities are held in the dematerialized form with a Depository. Hence, members would be able to transfer their shares only after necessarily dematerialising their physical shares. Hence, members are encouraged to dematerialize their physical holdings to demat form at the earliest.

In case of members holding shares in demat form, all intimations are to be sent to their respective Depository Participants (DPs). Shareholders may contact the Secretarial team in case of any query regarding their holdings in the Company.

On behalf of the Board

Chennai
April 26, 2019

M M Murugappan
Chairman

General Shareholder Information

A. Corporate Information

1. Registered office

"Parry House", 43, Moore Street, Chennai 600 001;
Tel No.:+91-44-30006161; Fax.:+91-44-30006149;
Email: cumigeneral@cumi.murugappa.com;
Website: www.cumi-murugappa.com

2. Corporate Identity Number

L29224TN1954PLC000318

3. Auditors

Statutory Auditor

Price Waterhouse Chartered Accountants LLP,
8th Floor, Prestige Palladium Bayan,
129-140, Greams Road, Chennai 600 006.

Cost Auditor

S Mahadevan & Co., Chennai, Cost Accountants,
No.1, 'Lakshmi Nivas', K.V. Colony, Third Street,
West Mambalam, Chennai 600 033.

Internal Auditor (for the FY 2018-19)

Ernst & Young LLP, Chartered Accountants,
6th & 7th Floor, A Block, Tidel Park,
4, Rajiv Gandhi Salai, Taramani, Chennai 600 113.

Secretarial Auditor (for the FY 2018-19)

R Sridharan & Associates, Company Secretaries,
New No. 5, (Old No. 12), Sivasailam Street,
T Nagar, Chennai 600 017.

4. Address for correspondence

Compliance Officer

Rekha Surendhiran, Company Secretary,
Carborundum Universal Limited,
"Parry House", 43, Moore Street, Chennai 600 001;
Tel: +91-44-30006141; Fax: +91-44-30006149;
E-mail: rekhas@cumi.murugappa.com

Investor Relationship Officer

Janani T A,
Carborundum Universal Limited,
"Parry House", 43, Moore Street, Chennai 600 001;
Tel: +91-44-30006166; Fax: +91-44-30006149;
E-mail: investorservices@cumi.murugappa.com

5. Registrar and Share Transfer Agent

Karvy Fintech Private Limited,
Unit: Carborundum Universal Limited,
Karvy Selenium Tower B, Plot 31-32, Financial District,
Nanakramguda, Serilingampally Mandal, Hyderabad 500 032;
Tel: +91-40-67162222; Fax: +91-40-23420814;
Toll Free no.: 1800-345-4001;
E-mail: einward.ris@karvy.com; Website: www.karvy.com;
Contact Person: Mrs. Varalakshmi P - Asst. General Manager.

6. Financial Year

1st April to 31st March

7. Dates of Book Closure

Wednesday, 24th July 2019 to Wednesday, 31st July 2019

8. Cost Audit Report

The Cost Audit report for financial year 2017-18 had been duly filed on 24th August 2018 through XBRL mode as mandated by the Ministry of Corporate Affairs within the due date. The due date for filing of Cost Audit report for the financial year 2018-19 is 30th September 2019.

9. Plant Locations

i. Plant locations of Carborundum Universal Limited

(a) 655, Tiruvottiyur High Road, P B No. 2272, Tiruvottiyur, Chennai - 600019 Tamil Nadu.

(b) Plot No.48, SIPCOT Industrial Complex, Hosur - 635126, Krishnagiri District, Tamil Nadu.

(c) Gopalpur Chandigarh, P.O. Ganga Nagar, Kolkata 700132, West Bengal.

(d) C-4 & C-5, Kamarajar Salai, MMDA Industrial Complex, Maraimalai Nagar - 603209, Kancheepuram District, Tamil Nadu.

(e) F-1/2, F2 - F5, SIPCOT Industrial Park, Pondur "A" Village, Sriperumbudur - 602105, Kanchipuram District, Tamil Nadu.

(f) K3, ASAHI Industrial Estate, Latherdeva Hoon, Mangalore Jhabrera Road, PO Jhabrera Tehsil Roorkee, Haridwar District, Uttarakhand - 247667.

(g) PB No.1 Kalamassery, Development Plot P.O, Kalamassery 683109, Ernakulam District, Kerala.

(h) PB No.3 Nalukettu, Koratty 680308, Trichur District, Kerala.

(i) Bhatia Mines, Bhatia Western Railway, Jamnagar District, Gujarat 361315,

(j) P.B No.2 Okha Port P.O., Jamnagar District, Gujarat 361350.

(k) Plot No.7 & 18, Cochin Special Economic Zone (CSEZ), Kakkanad 682037, Kochi, Kerala.

(l) Maniyar Hydroelectric Works, Maniyar P.O. Vadasserikara, Pathanamthitta District, Kerala 689662.

(m) Plot No.8, Carborundum Universal SEZ, K.D.Plot, Kochi, Kerala.

(n) Plot No.2 & 3, Carborundum Universal SEZ, K.D.Plot, Kochi, Kerala.

(o) Plot No.4, Carborundum Universal SEZ, K.D. Plot, Kochi, Kerala.

(p) Plot No.47, SIPCOT Industrial Complex, Hosur - 635126,Krishnagiri District, Tamil Nadu.

(q) Plot No.102 & 103, SIPCOT Industrial Complex (Phase II), Ranipet 632403, Tamil Nadu.

(r) Plant 2, Serkaddu Village, Vinnampalli Post, Katpadi Taluk, Vellore District - 632516, Tamil Nadu.

(s) Plot nos. 35, 37, 48-51, Adhartal Industrial Estate, Jabalpur - 482004, Madhya Pradesh.

ii. Plant locations of Subsidiaries/Joint Ventures

(a) Sterling Abrasives Ltd., Plot No.45/46 & Plot No.501, G I D C Estate, Odhav Road, Ahmedabad - 382415, Gujarat, India.

(b) Sterling Abrasives Ltd., Plot No 501, Near Anup Engineering, G.I.D.C., Odhav Road, Ahmedabad - 382415. Gujarat, India.

(c) Southern Energy Development Corporation Ltd., Plot no.29, Nallur PO, Aadichapuram, (Via) Mannargudi Taluk, Tiruvarur District - 614717, Tamil Nadu, India.

(d) Murugappa Morgan Thermal Ceramics Ltd., Plot No.26 & 27, SIPCOT Industrial Complex, Ranipet - 632403, Tamil Nadu, India.

(e) Murugappa Morgan Thermal Ceramics Ltd., Plot No.681, Moti Bhoyan Village, Sanand-Kalol Highway, Kalol Taluk, Gandhinagar, Dist., Gujarat - 382721, India.

(f) Wendt (India) Ltd., 69/70, SIPCOT Industrial Complex, Hosur - 635126, Krishnagiri District, Tamil Nadu, India.

(g) Volzhsky Abrasive Works, 404130 Volzhsky, Volgograd Region, 6th Autodoroge, 18, Russia.

(h) Foskor Zirconia (Pty.) Ltd., 27 Selati Road, Phalaborwa, South Africa, 1389.

(i) CUMI (Australia) Pty Ltd., 29 Gipps St, Carrington, NSW, 2294, Postal Address: PO Box 142, Carrington, NSW, 2294.

(j) CUMI (Australia) Pty Ltd., 1/253 Beringarra Ave, Malaga, WA 6944, Postal Address: PO Box 2538, Malaga, WA 6944.

(k) CUMI (Australia) Pty Ltd., 20, Waurn St, North Rockhampton, QLD 4701, Postal Address: PO Box 6494, Central QLD Mail Centre, Rockhampton, QLD 4702.

(l) Wendt Grinding Technologies Ltd. 109/21 Moo 4, Eastern Seaboard Industrial Estate (Rayong), Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong 21140, Thailand.

B. STOCK MARKET INFORMATION

1. Listing on stock exchanges and stock code

Stock Exchange	Stock Code
National Stock Exchange of India Ltd. Exchange Plaza, Bandra-Kurla Complex, Bandra (E), Mumbai 400 051	CARBORUNIV
BSE Ltd. Phiroze Jeejeebhoy Towers, Dalal Street, Mumbai 400 001	513375

Annual listing fees has been paid to the above stock exchanges.

International Securities Identification Number (ISIN): INE120A01034

2. Depositories Connectivity

The Company has signed agreements with the following Depositories to provide the facility of holding equity shares in dematerialised form:

National Securities Depository Ltd. (NSDL)	www.nsdl.co.in
Central Depository Services (India) Ltd. (CDSL)	www.cdslindia.com

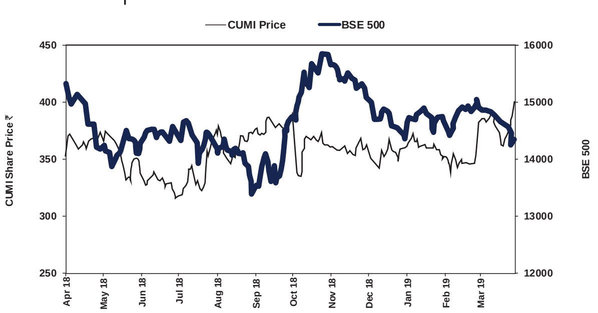
3. Share price information

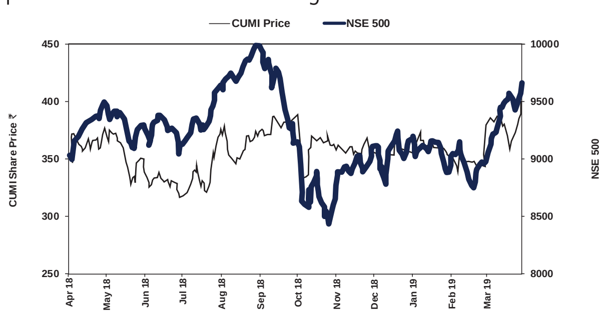
a) Monthly market price data

Month	BSE Limited			National Stock Exchange of India Limited		
	High ₹	Low ₹	Traded Volume (No. of shares)	High ₹	Low ₹	Traded Volume (No. of shares)
April 2018	380.00	346.10	240968	381.95	346.25	1246108
May 2018	383.70	325.00	129764	386.00	322.25	1357236
June 2018	346.15	314.35	207504	349.75	313.85	959148
July 2018	375.00	315.50	165029	378.40	314.00	1200257
August 2018	401.45	343.00	171163	401.90	345.00	1819703
September 2018	394.00	365.05	197523	394.00	365.00	2386943
October 2018	395.00	325.00	144785	395.10	325.10	1350402
November 2018	375.00	340.00	52710	371.80	347.95	545313
December 2018	368.35	333.85	75372	368.00	335.20	789500
January 2019	379.90	347.25	252401	378.00	346.00	3667007
February 2019	375.00	334.10	104917	373.80	334.20	677986
March 2019	415.25	355.65	1114650	418.85	356.90	4388529

b) Performance in comparison with BSE 500 and NSE 500

Stock market snapshot of CUMI Price v/s BSE 500 and NSE 500 during 1st April 2018 to 31st March 2019 is given below:





C. OTHER INFORMATION

1. Share Capital Details

(a) Outstanding shares

The total number of outstanding shares as on 31st March 2019 is 189,154,175. All the shares have been fully paid up. As on 31st March 2019, 186,803,592 equity shares constituting 98.76% of the total paid up capital of the Company have been dematerialised. A quarterly audit is carried out by an independent auditor with a view to reconcile the total share capital admitted with the Depositories and held in physical form with the issued and listed capital which is submitted to the stock exchanges and placed before the Board.

(b) Shareholding Pattern/Distribution as on 31st March 2019

(i) Shareholding Pattern

Category	% to total paid up capital
Promoter/Promoter Group	42.37
Foreign Institutional Investors	5.13
Financial Institutions including Insurance Companies	2.57
Non-resident (NRI's / OCBs)	1.64
Mutual Funds	21.24
Banks	0.03
Indian Bodies Corporate	6.79
Individuals	19.47
Others - Trusts/Clearing Members/IEPF	0.76
Total	**100.00**

(ii) Distribution of Shareholding

Sl. No.	Category (Shares)	No. of holders	% to holders	No. of Shares	% to Equity
1.	1 - 500	18,535	70.06	2,144,938	1.13
2.	500 - 1000	2,658	10.05	2,160,534	1.14
3.	1001 - 2000	1,983	7.50	3,139,184	1.67
4.	2001 - 3000	803	3.04	2,087,103	1.10
5.	3001 - 4000	944	3.57	3,541,338	1.87
6.	4001 - 5000	251	0.95	1,158,864	0.61
7.	5001 - 10000	639	2.42	4,679,922	2.47
8.	10001 - 20000	260	0.98	3,754,505	1.99
9.	20001 - 100000	259	0.98	11,389,727	6.02
10.	100001 and above	125	0.47	155,098,060	82.00
	Total	**26,457**	**100**	**189,154,175**	**100**

2. Outstanding GDR/ADR/Warrants etc.

Under the CUMI Employees Stock Option Scheme, 2007, the following Stock Options are outstanding as on 31st March 2019:

Sl. No.	Grant Date	Exercise Price in (₹)	Net Outstanding Options	Likely impact on full exercise	
				Share Capital ₹ million	Share Premium ₹ million
1.	29-Sep-07	91.80	-	-	-
2.	24-Jul-08	61.40	-	-	-
3.	27-Jan-11	125.08	164,492	0.16	20.41
4.	27-Jan-11	125.08	58,786	0.06	7.30
5.	05-Aug-11	146.00	190,080	0.19	27.56
6.	04-Feb-12	155.00	67,996	0.07	10.47
Total			**481,354**	**0.48**	**65.74**

Under the CUMI Employee Stock Option Plan 2016, the details of stock Options granted and outstanding are as follows:

Sl. No.	Grant Date	Exercise Price in (₹)	Net Outstanding Options	Likely impact on full exercise	
				Share Capital ₹ million	Share Premium ₹ million
1.	04-Feb-17	257.55	455,212	0.45	116.79
2.	14-Feb-18	367.20	50,870	0.05	18.63
3.	14-Feb-18	367.20	19,344	0.02	7.08
4.	03-Aug-18	369.85	105,880	0.11	39.05
5.	29-Oct-18	361.90	50,870	0.05	18.36
Total			**682,176**	**0.68**	**199.91**

Note:

(a) In respect of the Options referred in serial number 4 above of the Employee Stock Option Scheme 2007, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 3 years from the date of vesting, in respect of 50 per cent of the first tranche and 6 years from the date of vesting in respect of the remaining 50 per cent of the first tranche and all subsequent tranches. The vesting of Options granted, is based on the annual performance rating and as per the following schedule - 40% on expiry of the first year from the date of grant and 30% each on expiry of the second and third years from the date of grant.

b) In respect of all other Options granted under the Employee Stock Option Scheme 2007, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 3 years from the date of vesting in respect of the first tranche and 6 years from the date of vesting in respect of subsequent tranches. The vesting of Options, is based on the annual performance rating and as per the following schedule - 20% each on expiry of the first and second year from the date of grant and 30% each on expiry of third and fourth year from the date of grant.

c) In respect of Options referred in serial number 1, 2, 4 and 5 above of the Employee Stock Option Plan 2016, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 5 years from the date of vesting. The vesting of Options, is based on the annual performance rating and as per the following schedule - 20% each on expiry of the first and second year from the date of grant and 30% each on expiry of third and fourth year from the date of grant.

d) In respect of Options referred in serial number 3 above of the Employee Stock Option Plan 2016, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 5 years from the date of vesting. The vesting of Options, is based on the annual performance rating and as per the following schedule - 25% each on expiry of the first year from the date of grant and 37.50% each on expiry of second and third year from the date of grant.

Other than the above, there are no outstanding GDRs or ADRs or convertible instruments.

3. Share Transfer Process

The applications for transfer of shares and other requests from shareholders holding shares in physical form are processed by Karvy Fintech Private Ltd., Company's Registrar and Share Transfer Agent. The Board has delegated the power to approve transfers to the Stakeholders Relationship Committee. In respect of requests for transfer of shares upto 5000, the approving authority is the Managing Director and Company Secretary. In respect of transmission of shares, all requests are considered for approval by the Stakeholders Relationship Committee.

As stated in the Corporate Governance Report, Members holding shares in physical form are urged to dematerialise the shares as they would be unable to transfer the shares in physical form hereafter in view of the requirements prescribed in this regard by SEBI.

4. Unclaimed Shares

Particulars	No. of share holders	No. of Shares
Aggregate number of shareholders and the outstanding shares lying in the Unclaimed Suspense Account at the beginning of the year	186	289,620
Number of shareholders whose shares have been transferred during the year from the Unclaimed Suspense Account to the Investor Education and Protection Fund Authority pursuant to Section 124(6) of the Companies Act, 2013*	33	51,880
Number of shareholders who approached the Company for transfer of shares from the Unclaimed Suspense Account during the year in response to the Company's reminders	8#	9,590
Number of shareholders to whom shares were transferred from the Unclaimed Suspense Account during the year	7#	7,910
Aggregate number of shareholders and the outstanding shares lying in the Unclaimed Suspense Account at the end of the year	146	229,830

#one claim for 1,680 shares which was received during the year 2018-19 was transferred in April 2019.

*In respect of the shares transferred to the Investor Education and Protection Fund Authority, shareholders are entitled to claim these shares from the Investor Education and Protection Fund Authority by making an application in form IEPF-5 available on website *http://www.iepf.gov.in/IEPFA/corporates.html* along with the requisite documents after complying with the prescribed procedure.

On receipt of a claim for transfer from the Unclaimed Suspense Account, the Company will after verification, either credit the shares to the shareholder's demat account or deliver the physical certificate after re-materialising the same, as opted by the shareholder.

All corporate benefits in terms of securities accruing on these shares like bonus shares, sub-division, etc. will also be credited to the Unclaimed Suspense Account and the voting rights on these shares will remain frozen until the claim is made by the rightful owner.

5. AGM & Dividend details

(i) Forthcoming Annual General Meeting

Wednesday, the 31st July 2019 at 3.00 P.M. IST at TTK Auditorium, Music Academy, 168 (Old No. 306) TTK Road, Royapettah, Chennai 600 014. Proxies, to be valid, must be lodged at the registered office of the Company not later than 48 hours before commencement of the meeting.

(ii) Dividend

The Board at its meeting held on 1st February 2019 had approved payment of an interim dividend on the equity shares of the Company at 150% i.e., ₹1.50 per equity share which was paid on 18th February 2019. The Board at its meeting held on 26th April 2019 has further recommended a payment of final dividend at 125% i.e., ₹1.25/-per equity share for the year ended 31st March 2019. The final dividend will be paid by Thursday, 8th August 2019 upon declaration by the shareholders at the ensuing Annual General Meeting.

(iii) Unclaimed Dividend

Dividends remaining unclaimed/unpaid for a period of seven years shall be transferred to the Investor Education Protection Fund (IEPF). The details of dividend paid by the Company and the respective due dates of transfer of the unclaimed/unencashed dividend to the IEPF of the Central Government are as below:

Financial year to which dividend relates	Date of Declaration	Due date for transfer to IEPF
2011-12 (Final)	07-08-2012	13-09-2019
2012-13 (Interim)	05-02-2013	14-03-2020
2012-13 (Final)	30-07-2013	05-09-2020
2013-14 (Interim)	31-01-2014	09-03-2021
2013-14 (Final)	01-08-2014	07-09-2021
2014-15 (Interim)	29-01-2015	07-03-2022
2014-15 (Final)	03-08-2015	09-09-2022
2015-16 (Interim - I)	05-02-2016	13-03-2023
2015-16 (Interim - II)	11-03-2016	17-04-2023
2016-17 (Interim)	04-02-2017	13-03-2024
2016-17 (Final)	31-07-2017	06-09-2024
2017-18 (Interim)	14-02-2018	23-03-2025
2017-18 (Final)	03-08-2018	09-09-2025
2018-19 (Interim)	01-02-2019	10-03-2026

The Company has transferred unclaimed/unencashed dividends upto interim dividend for FY 2011-12 to the IEPF during the year ended 31st March 2019. The Company has uploaded the details relating to unclaimed dividends on its website for the information of its shareholders.

(iv) Shares transferred to IEPF

Pursuant to the notification of Section 124(6) of the Companies Act, 2013 and Investor Education and Authority (Accounting, Audit, Transfer and Refund) Rules, 2016, the Company is required to transfer shares in respect of which dividend has not been paid or claimed for seven consecutive years or more. During the year, the Company transferred 75,778 equity shares pertaining to 57 holders to the Investor Education and Protection Fund Authority pursuant to Section 124(6) of the Companies Act, 2013 and the Companies Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Rules, 2016 (amended from time to time). The Company had issued the requisite notice to the shareholders concerned intimating them of the impending transfer of shares and had simultaneously published a notice in leading dailies. Further, the Company has uploaded the details of the same on its website for the information of the shareholders. As at 31st March 2019, 591,673 shares pertaining to 483 holders have been transferred to the Investor Education and Protection Fund Authority.

Shareholders are entitled to claim the shares from the Investor Education and Protection Fund Authority by making an application online in Form IEPF-5 available on the website *http://www.iepf.gov.in/IEPFA/refund.html* along with the requisite documents. Shareholders are requested to contact the Company's RTA - Karvy Fintech Private Limited or the Company in this regard. The contact details are available in the Corporate Information section of this Report.

6. Other disclosures

During the year, there has been no instance where the Board did not accept the recommendation of its Committees. Further during the year, the Company has not raised funds through preferential allotment or qualified institutions placement.

On behalf of the Board

Chennai
April 26, 2019

M M Murugappan
Chairman

Declaration on Code of Conduct

To

The Members of Carborundum Universal Limited

This is to confirm that that the Board has laid down a Code of Conduct for all Board members and Senior Management of Company.

It is further confirmed that all Directors and Senior Management personnel of the Company have affirmed compliance with the Code of Conduct of the Company as at 31st March 2019, as envisaged in regulation 34(3) read with Schedule V of the Listing Regulations.

On behalf of the Board

Chennai
April 26, 2019

K Srinivasan
Managing Director

The Code of conduct is uploaded and available in the following link *http://www.cumi-murugappa.com/policies.html.*

Certificate on Corporate Governance

The Members
CARBORUNDUM UNIVERSAL LIMITED
Parry House,
43, Moore Street,
Chennai – 600 001

We have examined all relevant records of **Carborundum Universal Limited,** (CIN:L29224TN1954PLC000318) having its Registered Office at Parry House, 43, Moore Street, Chennai – 600 001, for the purpose of certifying compliance of the conditions of Corporate Governance under Regulation 17 to 27 and clauses (b) to (i) of regulation 46(2) and para C, D and E of Schedule V to the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 read with Regulation 34(3) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 for the financial year ended March 31, 2019. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of certification.

The compliance of the conditions of Corporate Governance is the responsibility of the management. Our examination was limited to the procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of Corporate Governance.

This Certificate is neither an assurance as to the future viability of the Company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company. It is neither an audit nor an expression of opinion on the financial statements of the Company.

In our opinion and to the best of our information and according to the explanations given to us and the representations made by the Management, we certify that the Company has complied regarding the conditions of Corporate Governance as stipulated under the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 for the financial year ended 31st March, 2019.

For R Sridharan & Associates
Company Secretaries
CS R Sridharan
FCS No. 4775
CP No. 3239
UIN: S2003TN063400

Chennai
April 26, 2019

Certificate of Non-Disqualification of Directors

[Pursuant to Regulation 34 (3) read with Schedule V Para-C Sub clause (10) (i) of Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015]

To,

The Members,
CARBORUNDUM UNIVERSAL LIMITED
Parry House, 43 Moore Street
Chennai - 600001

We have examined the relevant books, papers, minutes books, forms and returns filed, notices received from the Directors during the financial year under review and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives of **CARBORUNDUM UNIVERSAL LIMITED (CIN: L29224TN1954PLC000318)** having its Registered Office at Parry House, 43 Moore Street Chennai - 600001, (hereinafter referred to as "The Company") for the purpose of issue of certificate, in accordance with Regulation 34 (3) read with Schedule V Para-C Sub clause 10 (i) of Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 as amended vide Notification No: **SEBI/LAD-NRO/GN/2018/10** dated May 9, 2018 issued by the Securities and Exchange Board of India.

In our opinion and to the best of our knowledge and based on such examination as well as information and explanations furnished to us, which to the best of our knowledge and belief were necessary for the purpose of issue of this certificate and based on such verification as considered necessary, we hereby certify that None of the Directors as stated below on the Board of the Company as on 31st March 2019 have been debarred or disqualified from being appointed or continuing as Directors of the Companies by the Board (SEBI)/ Ministry of Corporate Affairs or any such other statutory authority.

S.No	DIN	NAME	DESIGNATION
1.	00170478	M M Murugappan	Non-Executive Chairman
2.	00177014	T L Palani Kumar	Non-Executive - Independent Director
3.	00004505	Sanjay Jayavarthanavelu	Non-Executive - Independent Director
4.	00201205	Aroon Raman	Non-Executive - Independent Director
5.	01892516	Bharati Rao	Non-Executive - Independent Director
6.	00202958	M A M Arunachalam	Non-Executive - Non Independent Director
7.	07812320	P S Raghavan	Non-Executive - Independent Director
8.	01756539	Sujjain S Talwar	Non-Executive - Independent Director
9.	00088424	K Srinivasan	Managing Director

We further state that such compliance is neither an assurance as to the future viability of the company nor of the efficiency or effectiveness with which the management has conducted the affairs of the company.

For R Sridharan & Associates
Company Secretaries
CS R Sridharan
CP No. 3239
FCS No. 4775
UIN: S2003TN063400

Chennai
April 26, 2019

Independent Auditors’ Report

To

The Members of Carborundum Universal Limited
Report on the Consolidated Indian Accounting Standards (Ind AS) Financial Statements

Opinion

1. We have audited the accompanying consolidated Ind AS financial statements of Carborundum Universal Limited (hereinafter referred to as the ‘‘Parent”) and its subsidiaries (the Parent and its subsidiaries together referred to as “the Group”), its associate along with its wholly owned subsidiaries (“Associate”) and jointly controlled entities (refer Note 32, 6A and 6B to the attached consolidated Ind AS financial statements), which comprise the consolidated Balance Sheet as at March 31, 2019, and the consolidated Statement of Profit and Loss (including Other Comprehensive Income), the consolidated statement of changes in equity, the consolidated cash flows Statement for the year then ended, and notes to the consolidated Ind AS financial statements, including a summary of significant accounting policies and other explanatory information prepared based on the relevant records. (hereinafter referred to as “the consolidated Ind AS financial statements”).

2. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid consolidated Ind AS financial statements give the information required by the Companies Act, 2013 (“the Act”) in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the consolidated state of affairs of the Group and of its jointly controlled entities and Associate as at March 31, 2019, of consolidated total comprehensive income (comprising of profit and other comprehensive income), consolidated changes in equity and its consolidated cash flows for the year then ended.

Basis for Opinion

3. We conducted our audit in accordance with the Standards on Auditing (SAs) specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the Auditor’s Responsibilities for the Audit of the Consolidated Ind AS Financial Statements section of our report. We are independent of the Group and of its jointly controlled entities and associate in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in India in terms of Code of Ethics issued by Institute of Chartered Accountants of India and the relevant provisions of the Companies Act, 2013 and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in sub-paragraph 18 of the Other Matters section below, other than the unaudited financial statements as certified by the management and referred to in sub-paragraph 19 of the Other Matters section below, is sufficient and appropriate to provide a basis for our opinion.

Material uncertainty related to going concern of a step down subsidiary

4. We draw your attention to the following Material Uncertainty related to Going concern paragraph included in the audit report on the financial statements of Foskor Zirconia Pty Limited which is a subsidiary of CUMI International Limited, a subsidiary of the Parent, issued by an independent firm of Chartered Accountants vide its report dated April 24, 2019 reproduced by us as under:

   “We draw attention to the condensed income statement, which indicates that Foskor Zirconia (Pty) Ltd incurred a net loss of R48 413 576 during the year ended 31 March 2019. As at that date, the liabilities of the company exceeded its assets by R45 963 142. These events or conditions indicate that a material uncertainty exists that may cast significant doubt on Foskor Zirconia (Pty) Ltd’s ability to continue as a going concern. Our opinion is not modified in respect of the above matter.”

   Our opinion on the consolidated Ind AS financial statements is not modified in respect of the above matter.

Key Audit Matters

5. Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated Ind AS financial statements of the current period. These matters were addressed in the context of our audit of the consolidated Ind AS financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the key audit matter
Appropriateness of revenue recognition on sale of goods and services by the Parent Refer note 3.4 and note 22 of the consolidated financial statements. During the year, the Parent has recognised revenue of ₹17,519.12 million as revenue from sale of goods and services. Revenue from sale of goods is recognised under Ind AS 115 - ‘Revenue from Contracts with Customers’ at a point in time when the control has been transferred, which generally coincides with dispatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales. Revenue from services is recognised over a period of time/ at a point in time, as per the terms agreed with the customers.	Our audit procedures relating to revenue recognition include the following: a. Understood and performed procedures to assess the design and test the operating effectiveness of relevant controls related to recording of revenue including the related discounts. b. Assessed whether the policy of recognising revenue was in line with Ind AS - 115. c. Tested the reconciliation of the amounts as per the sales register to the general ledger. d. Performed tests, on sample basis by validating the amounts recorded with the underlying documents which inter - alia includes invoices, dispatch documents, customer orders/contracts, receipt of consideration from customers and allocation of variable consideration namely discounts. e. Performed tests, on sample basis on revenue recognised from services, and ensured that the revenue was recognised

Key audit matter	How our audit addressed the key audit matter
We determined this to be a key audit matter due to the significance of the time and effort involved in assessing the appropriateness of revenue recognition including accounting for the discounts and covering the aspects of completeness, accuracy, occurrence and cut off.	over a period of time/ at a point in time, as per the terms contracted with customers. f. Performed cut off testing, on sample basis and ensured that the revenue from sale of goods is recognized in the appropriate period. Based on the above procedures performed, we did not identify any exceptions in revenue recognition on sale of goods and services.

6. The following Key Audit Matters was included in the audit report dated April 9, 2019, containing an unmodified audit opinion on the financial statements of Net Access India Limited, a subsidiary of the Parent issued by an independent firm of Chartered Accountants is reproduced by us as under:

Key audit matter	How our audit addressed the key audit matter
Revenue from Operations includes Revenue from Sale of goods and rendering of Services is recognized and accrued with reference to the delivery/ performance of the Obligations and the terms of agreements for such services. For the year ended 31 March 2019, Revenue from Sale of Goods amounting to ₹846.82 in lakhs and rendering of services amounting to ₹3667.01 in lakhs is recognized based on delivery/performance of the obligations and terms of agreements as agreed with the Customers and confirmed by the management of the Company. The delivery/performance of the obligation is applied based on the terms of agreements agreed with the customers or estimated by management based on the terms of the agreement or latest negotiation with customers and other industry considerations as appropriate. Due to the large variety of services and complexity of contractual terms, as well as ongoing negotiations with customers, significant judgements are required to estimate and identify the delivery/performance of the obligations as agreed in the agreements. If the actual delivery/ performance of obligations differ from the estimates as applied, this will have an impact on the accuracy of revenue recognized in the current year and accrued as at year end.	We have performed the following procedures in relation to accuracy of revenue recognized and accrued: • Understood, evaluated and tested the key controls over delivery/ performance of obligations as agreed with customers under the terms of agreement. We selected a sample of transactions and: • Agreed the applied delivery/ performance of obligations to the respective terms in the contracts or latest correspondence with customers where there have been estimates by management. • Tested revenue calculations and agreed the revenue recognized to the underlying accounting records. • Checked the bank advices or credit notes on a sample basis for the net settlement and reviewed aged items for any disputed amounts.

Other Information

7. The parent Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Directors' Report including Annexures and Corporate Governance Report, but does not include the consolidated Ind AS financial statements and our auditor's report thereon.

8. Our opinion on the consolidated Ind AS financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

9. In connection with our audit of the consolidated Ind AS financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated Ind AS financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed and the reports of the other auditors as furnished to us (Refer paragraph 18 below), we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Consolidated Ind AS Financial Statements

10. The Parent's Board of Directors is responsible for the preparation and presentation of these consolidated Ind AS financial statements in terms of the requirements of the Companies Act, 2013 that give a true and fair view of the consolidated financial position, consolidated financial performance, consolidated cash flows and consolidated statement of changes in equity of the Group including its jointly controlled entities and associate in accordance with the accounting principles generally accepted in India, including the Ind AS specified under Section 133 of the Act. The respective Board of Directors of the companies included in the Group and of its jointly controlled entities and associate are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Group, jointly controlled entities and associate and for preventing and detecting frauds and other irregularities; the selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which have been used for the purpose of preparation of the consolidated

Ind AS financial statements by the Directors of the Parent, as aforesaid.

11. In preparing the consolidated Ind AS financial statements, the respective Board of Directors of the companies included in the Group and of its jointly controlled entities and associate are responsible for assessing the ability of the Group and of its jointly controlled entities and associate to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

12. The respective Board of Directors of the companies included in the Group and of its jointly controlled entities and associate are responsible for overseeing the financial reporting process of the Group and of its jointly controlled entities and associate.

Auditor's Responsibilities for the Audit of the Consolidated Ind AS Financial Statements

13. Our objectives are to obtain reasonable assurance about whether the consolidated Ind AS financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated Ind AS financial statements.

14. As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated Ind AS financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Companies Act, 2013, we are also responsible for expressing our opinion on whether the Parent has adequate internal financial controls with reference to financial statements are in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the Group and of its jointly controlled entities and associate to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated Ind AS financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group and of its jointly controlled entities and associate to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated Ind AS financial statements, including the disclosures, and whether the consolidated Ind AS financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group and of its jointly controlled entities and associate to express an opinion on the consolidated Ind AS financial statements. We are responsible for the direction, supervision and performance of the audit of the financial statements of such entities included in the consolidated Ind AS financial statements of which we are the independent auditors. For the other entities included in the consolidated Ind AS financial statements, which have been audited by other auditors, such other auditors remain responsible for the direction, supervision and performance of the audits carried out by them. We remain solely responsible for our audit opinion.

15. We communicate with those charged with governance of the Parent and such other entities included in the consolidated Ind AS financial statements of which we are the independent auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

16. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

17. From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated Ind AS financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Matters

18. We did not audit the financial statements/financial information of eleven subsidiaries, whose financial statements/financial information reflect total assets of ₹12,763 million and net assets of ₹9,965 million as at March 31, 2019, total revenue of ₹11,371 million, total comprehensive income (comprising of profit and other comprehensive income) of ₹1,463 million and net cash out flows amounting to ₹224 million for the year ended on that date, as considered in the consolidated Ind AS financial statements. The consolidated Ind AS financial statements also include the Group's share of total comprehensive income (comprising of profit and other comprehensive income) of ₹136 million for the year ended March 31, 2019 as considered in the consolidated Ind AS financial statements, in respect of two jointly controlled entities whose financial statements/financial information have not been audited by us. These financial statements/financial information have been audited by other auditors whose reports have been furnished to us by the Management, and our opinion on the consolidated Ind AS financial statements insofar as it relates to the amounts and disclosures included in respect of these subsidiaries and jointly controlled entities and our report in terms of sub-section (3) of Section 143 of the Act including report on Other Information insofar as it relates to the aforesaid subsidiaries and jointly controlled entities, is based solely on the reports of the other auditors.

19. We did not audit the financial statements/financial information of one subsidiary, whose financial statements/financial information reflect total assets of ₹Nil and net assets of ₹Nil as at March 31, 2019, total revenue of ₹Nil, total comprehensive income (comprising of loss and other comprehensive income) of ₹Nil and net cash flows amounting to ₹Nil for the year ended on that date, as considered in the consolidated Ind AS financial statements. These financial statements/financial information are unaudited and have been furnished to us by the Management, and our opinion on the consolidated Ind AS financial statements insofar as it relates to the amounts and disclosures included in respect of this subsidiary and our report in terms of sub-section (3) of Section 143 of the Act including report on Other Information insofar as it relates to the aforesaid subsidiary, is based solely on such unaudited financial statements/financial information. In our opinion and according to the information and explanations given to us by the Management, these financial statements/financial information are not material to the Group.

20. The financial statements/the financial information of eight subsidiaries located outside India, included in the consolidated Ind AS financial statements, which constitute total assets of ₹10,652 million and net assets of ₹8,180 million as at March 31, 2019, total revenue of ₹9,821 million, total comprehensive income (comprising of profit/ loss and other comprehensive income) of ₹1,033 million and net cash out flows amounting to ₹207 million for the year then ended; have been prepared in accordance with accounting principles generally accepted in their respective countries and have been audited by other auditors under generally accepted auditing standards applicable in their respective countries. The Parent's management has converted the financial statements/ financial information of such subsidiaries located outside India from the accounting principles generally accepted in their respective countries to the accounting principles generally accepted in India. We have audited these conversion adjustments made by the Parent's management. Our opinion insofar as it relates to the balances and affairs of such subsidiaries located outside India, including other information, is based on the report of other auditors and the conversion adjustments prepared by the management of the Parent and audited by us.

Our opinion on the consolidated Ind AS financial statements, and our report on Other Legal and Regulatory Requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors and the financial statements /financial information certified by the Parent's Management.

Report on Other Legal and Regulatory Requirements

21. As required by Section 143(3) of the Act, we report, to the extent applicable, that:

    (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid consolidated Ind AS financial statements.

    (b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidated Ind AS financial statements have been kept so far as it appears from our examination of those books and the reports of the other auditors.

    (c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss (including other comprehensive income), Consolidated Statement of Changes in Equity and the Consolidated Cash Flow Statement dealt with by this Report are in agreement with the relevant books of account and records maintained for the purpose of preparation of the consolidated Ind AS financial statements.

    (d) In our opinion, the aforesaid consolidated Ind AS financial statements comply with the Accounting Standards specified under Section 133 of the Act.

    (e) On the basis of the written representations received from the directors of the Parent Company as on March 31, 2019 taken on record by the Board of Directors of the Parent and the reports of the statutory auditors of its subsidiary companies, jointly controlled entities and associate incorporated in India, none of the directors of the Parent, its subsidiaries included in the group, associate and jointly controlled entities incorporated in India are disqualified as on March 31, 2019 from being appointed as a director in terms of Section 164(2) of the Act.

    (f) With respect to the adequacy of internal financial controls with reference to the financial statements of the Parent, its subsidiary companies, jointly controlled entities and associate incorporated in India and the operating effectiveness of such controls, refer to our separate report in Annexure A.

(g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditor's) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

i. The consolidated Ind AS financial statements disclose the impact, if any, of pending litigations on the consolidated financial position of the Group, its jointly controlled entities and associate - Refer Note 33 to the consolidated Ind AS financial statements.

ii. The Parent, its jointly controlled entities and associate did not have any material foreseeable losses on long-term contracts and there were no losses on derivative contracts as at March 31, 2019.

iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Parent and its subsidiary companies, jointly controlled entities and associate incorporated in India.

iv. The reporting on disclosures relating to Specified Bank Notes is not applicable to the Group for the year ended March 31, 2019.

For Price Waterhouse Chartered Accountants LLP
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership No. 100332

Place: Chennai
Date: April 26, 2019

Annexure A to Independent Auditors' Report

Referred to in paragraph 21(f) of the Independent Auditors' Report of even date to the members of Carborundum Universal Limited on the consolidated Ind AS financial statements for the year ended March 31, 2019

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Act

1. In conjunction with our audit of the consolidated financial statements of the Company as of and for the year ended March 31, 2019, we have audited the internal financial controls with reference to financial statements of Carborundum Universal Limited (hereinafter referred to as "the Parent") and its subsidiary companies, its associate company and jointly controlled entities, which are companies incorporated in India, as of that date.

Management's Responsibility for Internal Financial Controls

2. The respective Board of Directors of the Parent, its subsidiary companies, its associate company and jointly controlled entities, to whom reporting under clause (i) of sub section 3 of Section 143 of the Act in respect of the adequacy of the internal financial controls with reference to financial statements is applicable which are companies incorporated in India, are responsible for establishing and maintaining internal financial controls based on "internal control with reference to financial statements criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI)". These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the respective company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

Auditor's Responsibility

3. Our responsibility is to express an opinion on the Company's internal financial controls with reference to financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") issued by the ICAI and the Standards on Auditing deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal financial controls issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to financial statements was established and maintained and if such controls operated effectively in all material respects.

4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system with reference to financial statements and their operating effectiveness. Our audit of internal financial controls with reference to financial statements included obtaining an understanding of internal financial controls with reference to financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

5. We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports

referred to in the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system with reference to financial statements.

Meaning of Internal Financial Controls with reference to Financial Statements

6. A company's internal financial control with reference to financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control with reference to financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls with reference to Financial Statements

7. Because of the inherent limitations of internal financial controls with reference to financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to financial statements to future periods are subject to the risk that the internal financial control with reference to financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

8. In our opinion, the Parent, its subsidiary companies, its associate company and jointly controlled entities, which are companies incorporated in India, have, in all material respects, an adequate internal financial controls system with reference to financial statements and such internal financial controls with reference to financial statements were operating effectively as at March 31, 2019, based on the internal control with reference to financial statements criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

Other Matters

9. Our aforesaid reports under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls with reference to financial statements insofar as it relates to three subsidiary companies, and two jointly controlled companies, which are companies incorporated in India, is based on the corresponding reports of the auditors of such companies incorporated in India. Our opinion is not qualified in respect of this matter.

For Price Waterhouse Chartered Accountants LLP
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership No. 100332

Place: Chennai
Date: April 26, 2019

Consolidated Balance Sheet

(in Indian Rupees million, unless otherwise stated)

Particulars	Notes	As at 31.03.2019	As at 31.03.2018
ASSETS			
Non-current assets			
(a) Property, plant and equipment	4A	5687.34	6144.01
(b) Capital work-in-progress	4B	463.88	302.51
(c) Goodwill	5A	1222.82	1151.41
(d) Other Intangible assets	5B(i)	40.04	61.03
(e) Intangible assets under development	5B(ii)	-	0.29
(f) Investment accounted for using the equity method			
(i) Investments in associate	6A	519.31	484.89
(ii) Investments in joint ventures	6B	681.50	587.27
(g) Financial assets			
(i) Investments	6C(i)	103.13	160.29
(ii) Other financial assets	7A	133.39	120.76
(h) Deferred tax assets (net)	8A	101.05	109.64
(i) Other non-current assets	9A	369.72	310.91
Total non-current assets		**9322.18**	**9433.01**
Current assets			
(a) Inventories	10	5328.55	4380.24
(b) Financial assets			
(i) Other Investments	6C(ii)	961.25	570.49
(ii) Trade receivables	11	5139.22	4750.60
(iii) Cash and Cash equivalents	12A	959.37	1276.34
(iv) Bank balances other than (iii) above	12B	15.70	12.76
(v) Other Financial assets	7B	70.63	54.66
(c) Other Current assets	9B	523.42	507.11
Total current assets		**12998.14**	**11552.20**
Total Assets		**22320.32**	**20985.21**
EQUITY AND LIABILITIES			
Equity			
(a) Equity share capital	13	189.15	188.96
(b) Other equity	14	17051.87	15454.54
Equity attributable to owners of the Company		17241.02	15643.50
Non-controlling interests	15	523.10	614.74
Total Equity		**17764.12**	**16258.24**
Non-current liabilities			
(a) Financial liabilities			
Borrowings	16	50.75	66.32
(b) Provisions	17A	96.05	91.69
(c) Deferred tax liabilities (net)	8B	355.42	383.15
Total Non-current liabilities		**502.22**	**541.16**
Current liabilities			
(a) Financial liabilities			
(i) Borrowings	18	867.80	1181.59
(ii) Trade payables			
(a) Total outstanding dues of micro enterprises and small enterprises	19	30.36	16.21
(b) Total outstanding dues of creditors other than micro enterprises and small enterprises	19	2056.40	1959.46
(iii) Other financial liabilities	20	743.31	667.61
(b) Provisions	17B	175.25	170.59
(c) Other current liabilities	21	180.86	190.35
Total Current liabilities		**4053.98**	**4185.81**
Total Liabilities		**4556.20**	**4726.97**
Total Equity and Liabilities		**22320.32**	**20985.21**
See accompanying notes forming part of the consolidated financial statements			

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership Number: 100332
Chennai
April 26, 2019

On behalf of the Board

M M Murugappan
Chairman

K Srinivasan
Managing Director

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Consolidated Statement of Profit and Loss

(in Indian Rupees million, unless otherwise stated)

S.No.	Particulars	Notes	For the year 2018-19	For the year 2017-18
I	Revenue from Operations	22	26889.04	23951.68
II	Other Income	23	272.98	229.17
III	**Total Income**		**27162.02**	**24180.85**
IV	**Expenses**			
	Cost of material consumed		8725.66	6465.27
	Purchase of stock-in-trade		1091.34	1340.35
	Changes in inventories of finished goods, stock-in-trade and work-in-progress	24	(267.43)	243.67
	Excise duty on sale of goods		-	274.07
	Employee benefit expense	25	3273.19	3109.14
	Finance costs	26	84.83	86.12
	Depreciation and amortisation expense	27	1082.71	1059.95
	Other expenses	28	9683.24	8532.73
	Total expenses (IV)		**23673.54**	**21111.30**
V	**Profit from operations before share of profit of equity accounted investees and income tax [III] - [IV]**		**3488.48**	**3069.55**
VI	Share of profit of associate (net of tax)	6A	61.45	52.32
VII	Share of profit of joint ventures (net of tax)	6B	137.87	94.28
VIII	**Profit before tax [V] +[VI]+[VII]**		**3687.80**	**3216.15**
IX	**Tax expense**			
	(1) Current tax	29A	1233.06	1114.72
	(2) Deferred tax	8	(21.26)	(94.45)
	Total tax [IX]		**1211.80**	**1020.27**
X	**Profit for the year [VIII]-[IX]**		**2476.00**	**2195.88**
XI	**Other Comprehensive Income [OCI]**			
A	(i) Items that will not be reclassified to profit or loss			
	(a) Remeasurement of the defined benefit plans		25.02	3.59
	(b) Equity instruments through Other Comprehensive Income		(57.81)	26.63
	(c) Share of OCI in associate and joint ventures, to the extent not to be reclassified to profit or loss		(5.38)	2.34
	(ii) Income tax relating to items that will not be reclassified to profit or loss	29B	-	-
			(38.17)	**32.56**
B	(i) Items that will be reclassified to profit or loss			
	(a) Exchange differences in translating the financial statements of foreign operations		(311.11)	(19.92)
	(b) Effective portion of gain and loss on designated portion of hedging instruments in a cash flow hedge		3.04	(3.94)
	(c) Share of OCI in associate and joint ventures, to the extent that may be reclassified to profit or loss		4.58	7.34
	(ii) Income tax relating to items that will be reclassified to profit or loss	29B	(0.89)	1.33
			(304.38)	**(15.19)**
	Total Other Comprehensive Income [XI]		**(342.55)**	**17.37**
XII	**Total Comprehensive Income [X]+[XI]**		**2133.45**	**2213.25**
	Profit for the year attributable to: [X]		2476.00	2195.88
	- Owners of the Company		2476.78	2155.96
	- Non-Controlling Interest		(0.78)	39.92
	Other Comprehensive Income: [XI]		(342.55)	17.37
	- Owners of the Company		(343.90)	18.47
	- Non-Controlling Interest		1.35	(1.10)
	Total Comprehensive Income: [XII]		2133.45	2213.25
	- Owners of the Company		2132.88	2174.43
	- Non-Controlling Interest		0.57	38.82
XIII	**Earnings per share (₹1 each) on Profit for the year (X)**	30		
	- Basic		13.10	11.42
	- Diluted		13.07	11.39

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership Number: 100332
Chennai
April 26, 2019

On behalf of the Board

M M Murugappan
Chairman

K Srinivasan
Managing Director

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Consolidated Statement of changes in equity

(in Indian Rupees million, unless otherwise stated)

A. Equity share capital - Refer Note: 13

Balance as at March 31, 2017	**188.66**
Changes in equity share capital during the year	
Shares issued against ESOP Scheme/Plan	0.30
Balance as at March 31, 2018	**188.96**
Changes in equity share capital during the year	
Shares issued against ESOP Scheme/Plan	0.19
Balance as at March 31, 2019	**189.15**

B. Statement of changes in other equity - Refer Note: 14 & 15

Particulars	Reserves and Surplus - Refer Note: 14A							Items of Other Comprehensive Income - Refer Note 14B				Share application money pending allotment - Refer Note: 14C	Attributable to owners of the parent - Refer Note:14	Non-controlling interest [NCI] - Refer Note: 15	Total
	Profit on Forfeiture of Shares / Warrants	Capital redemption reserve	Capital reserve on consolidation	Securities premium	General Reserve	Share options outstanding account	Retained Earnings	Reserve for equity instruments	Effective portion of Cash flow hedge	Foreign currency translation reserve	Revaluation surplus				
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)				
Balance at the beginning of the year - March 31, 2017	**6.03**	**27.68**	**704.65**	**194.15**	**6230.94**	**16.08**	**6107.27**	**57.79**	**1.82**	**269.05**	**23.74**		**13639.20**	**656.63**	**14295.83**
Profit for the year							2155.96						2155.96	39.92	2195.88
Other Comprehensive Income for the year							5.99	26.63	(1.57)	(12.58)			18.47	(1.10)	17.37
Total Comprehensive Income for the year	**-**	**-**	**-**	**-**	**-**	**-**	**2161.95**	**26.63**	**(1.57)**	**(12.58)**	**-**		**2174.43**	**38.82**	**2213.25**
Additions during the year			2.12	32.04		14.76							48.92		48.92
Share application money received pending for allotment												0.23	0.23		0.23
Final dividend paid during the year							(141.51)						(141.51)		(141.51)
Dividend tax on Final dividend paid during the year							(14.92)						(14.92)		(14.92)
Interim dividend paid during the year							(188.93)						(188.93)		(188.93)
Dividend tax paid during the year							(20.31)						(20.31)		(20.31)
Dividend tax paid by Subsidiaries and Joint Ventures							(42.57)						(42.57)		(42.57)
Transfer to General reserve					500.00		(500.00)						-		-
Dividend paid to NCI and its relevant tax							-						-	(84.36)	(84.36)
Translation impact on foreign subsidiaries NCI portion							-						-	3.65	3.65
Balance at the end of the year - March 31, 2018	**6.03**	**27.68**	**706.77**	**226.19**	**6730.94**	**30.84**	**7360.98**	**84.42**	**0.25**	**256.47**	**23.74**	**0.23**	**15454.54**	**614.74**	**16069.28**
Profit for the year							2476.78						2476.78	(0.78)	2476.00
Other Comprehensive Income for the year							19.16	(57.81)	1.29	(306.53)			(343.89)	1.35	(342.54)
Total Comprehensive Income for the year	**-**	**-**	**-**	**-**	**-**	**-**	**2495.94**	**(57.81)**	**1.29**	**(306.53)**	**-**		**2132.89**	**0.57**	**2133.46**
Additions during the year			43.56	27.92		15.85							87.33		87.33
Share application money received pending for allotment												(0.23)	(0.23)		(0.23)
Final dividend paid during the year							(236.30)						(236.30)		(236.30)
Dividend tax on Final dividend paid during the year							(35.27)						(35.27)		(35.27)
Interim dividend paid during the year							(283.71)						(283.71)		(283.71)
Dividend tax paid during the year							(44.22)						(44.22)		(44.22)
Dividend tax paid by Subsidiaries and Joint Ventures							(23.16)						(23.16)		(23.16)
Transfer to General reserve					500.00		(500.00)						-		-
Dividend paid to NCI and its relevant tax							-						-	(82.95)	(82.95)
Translation impact on foreign subsidiaries NCI portion							-						-	(9.26)	(9.26)
Balance at the end of the year - March 31, 2019	**6.03**	**27.68**	**750.33**	**254.11**	**7230.94**	**46.69**	**8734.26**	**26.61**	**1.54**	**(50.06)**	**23.74**	**-**	**17051.87**	**523.10**	**17574.97**

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached
For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek, *Partner*
Membership Number: 100332
Chennai
April 26, 2019

On behalf of the Board

M M Murugappan
Chairman

K Srinivasan
Managing Director

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Consolidated Cash Flow Statement
(in Indian Rupees million, unless otherwise stated)

Particulars		2018-19		2017-18	
Profit before tax			**3687.80**		**3216.15**
Adjustment for:					
Share of profit of associate		(61.45)		(52.32)	
Share of profit of Joint Ventures		(137.87)		(94.28)	
Fair value of Investments		(0.70)		(0.78)	
Depreciation and amortisation		1082.71		1059.95	
Finance costs		84.83		86.12	
Interest income		(48.24)		(35.54)	
Profit on sale of Investment		(0.12)		-	
Dividend income		(42.81)		(14.60)	
Expenses recognised in respect of equity-settled share-based payments		15.85		14.76	
Impairment loss on financial assets (net)		2.96		6.90	
Allowance for doubtful receivable and advances		36.42		33.22	
Reversal of allowance for doubtful receivables and advances		(33.20)		(30.94)	
Provision for expenses no longer required written back		(9.59)		(17.61)	
Loss/(profit) on sale of assets (net)		(2.49)		0.93	
Loss/(profit) on exchange fluctuation (net)		39.75	**926.05**	(26.60)	**929.21**
Operating profit before working capital changes			**4613.85**		**4145.36**
Movement in working capital					
(Increase)/decrease in trade receivables		(458.74)		(1058.04)	
(Increase)/decrease in Inventories		(1054.96)		(479.63)	
(Increase)/decrease in Other financial asset		(29.77)		(11.00)	
(Increase)/decrease in Other assets		(39.37)		155.07	
Increase/(decrease) in Trade payables		107.54		452.71	
Increase/(decrease) in Provision & other current liabilities		16.07		(11.22)	
Increase/(decrease) in Other financial liabilities		63.44	**(1395.79)**	45.04	**(907.07)**
Cash generated from Operations			**3218.06**		**3238.29**
Income tax paid			(1199.78)		(1108.51)
Net cash generated by Operating activities	**[A]**		**2018.28**		**2129.78**
Cash flow from Investing activities					
Payments to acquire fixed asset		(948.29)		(920.76)	
Payments for Intangible asset		(13.77)		(18.22)	
Proceeds from sale of fixed assets		13.00		19.09	
Dividend income from Associate		23.92		19.93	
Dividend income from Joint Ventures		34.62		101.54	
Proceeds/(Purchase) of Investments		0.16		(0.04)	
Interest income received		48.23		35.53	
Dividend income received		42.81		14.60	
Net cash (used in)/generated by Investing activities	**[B]**		**(799.32)**		**(748.33)**

Consolidated Cash Flow Statement

(in Indian Rupees million, unless otherwise stated)

Particulars	2018-19		2017-18	
Cash flow from Financing activities				
Proceeds from issue of equity shares	27.88		32.34	
Share application money pending allotment	-		0.23	
Repayment/proceeds from long term borrowings	(0.21)		(33.36)	
Repayment/proceeds from borrowings	(335.84)		(273.56)	
Finance costs paid	(84.83)		(86.12)	
Dividend paid to shareholder	(520.01)		(330.44)	
Tax on Dividend	(79.49)		(35.23)	
Dividend paid to Non-Controlling interest and its related tax	(82.95)		(84.36)	
Tax on Dividend - Subsidiaries	(16.03)		(21.90)	
Net cash used in Financing activities [C]		**(1091.48)**		**(832.40)**
Net increase/(decrease) in cash and cash equivalents [A]+[B]+[C]		**127.48**		**549.05**
Add: Cash and Cash equivalents at the beginning of the year		**1846.83**		**1298.03**
Effect of exchange rate changes on the balances of cash and cash equivalents held in foreign currencies		(53.69)		(0.25)
Cash and Cash equivalents at the end of the year		**1920.62**		**1846.83**
Reconciliation of Cash and cash equivalents with the Balance Sheet:				
Cash and cash equivalents at the beginning of the year				
Cash and cash equivalents - Refer Note: 12A		1276.34		1248.39
Current investment considered as Cash and Cash equivalents - Refer Note: 6C(ii)		570.49		49.64
		1846.83		**1298.03**
Cash and cash equivalents at the end of the year				
Cash and cash equivalents - Refer Note: 12A		959.37		1276.34
Current investment considered as Cash and Cash equivalents - Refer Note: 6C(ii)		961.25		570.49
		1920.62		**1846.83**

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership Number: 100332
Chennai
April 26, 2019

On behalf of the Board

M M Murugappan
Chairman

K Srinivasan
Managing Director

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Notes forming part of the Consolidated Financial Statements
For the year ended March 31, 2019

Statement showing the applicable Key Accounting Standards (Ind AS) with related Policy & Notes references as per Consolidated Financial Statements.

Ind AS No.	Description	Accounting policy Reference	Note Reference
2	Inventories	3.16	10
7	Statement of Cash flows	3.15	12,16
8	Accounting Policies, Changes in Accounting Estimates and Errors		42
10	Event after the reporting period		41,44
12	Income taxes	3.10	29,8
16	Property, plant and equipment	3.11	4,27
17	Leases	3.23	4,37
115	Revenue form Contracts with Customers	3.4	22,31,21
19	Employee benefits	3.8	25,34
24	Related party disclosures		36
28	Investments in associates and joint ventures	3.1.2.2	6A,6B
33	Earnings per share	3.24	30
36	Impairment of assets	3.13	4,5
37	Provisions, Contingent liabilities and Contingent assets	3.17, 3.18	17,33
38	Intangible assets	3.12	5,27
102	Share based payment	3.9	25
103	Business combinations	3.12.3	5
105	Non-current Assets held for sale and discontinued operations	3.3	
107	Financial Instruments - Disclosures	3.19, 3.26, 3.27	11,16,18, 23, 35
108	Operating segments	3.22	31
112	Disclosure of interest in other entities		6A,6B,15
113	Fair value measurement		35

Notes forming part of the Consolidated Financial Statements

For the year ended March 31, 2019

1. General information

Carborundum Universal Limited (CUMI) was incorporated in India as a Public Limited Company in 1954 and the shares of the Company are listed in National Stock Exchange of India Ltd. and BSE Ltd. The address of its registered office and place of business are disclosed in the annual report. The consolidated financial statements comprise the Company (CUMI - Parent company) and its subsidiaries (referred to collectively as the 'Group') and the Group's interest in associate and joint ventures.

CUMI Group manufactures and sells mainly Abrasives, Ceramics (Industrial Ceramics, Refractories) and Electrominerals (Refer Note: 31).

2. Basis of Preparation

2.1 Application of Indian Accounting Standards (Ind AS)

The financial statements comply in all material aspects with Indian Accounting Standards (Ind AS) notified under Section 133 of the Companies Act, 2013 (the Act) [Companies (Indian Accounting Standards) Rules, 2015] and other relevant provisions of the Act.

2.2 New and amended Standard adopted by the Group

The Group has applied the following standards and amendments for the first time in its annual reporting period commencing April 01, 2018:

- Ind AS 115, Revenue from Contract with Customers
- Amendment to Ind AS 20, Accounting for Government Grants and Disclosure of Government Assistance
- Appendix B, Foreign Currency Transactions and Advance consideration to Ind AS 21, The Effect of Changes in Foreign Exchange Rates
- Amendment to Ind AS 12, Income taxes
- Amendment to Ind AS 28, Investment in Associate and Joint ventures and Ind AS 112, Disclosure of Interest in Other entities.

The Group had to change its accounting policies and applied modified retrospective approach on application of Ind AS 115. The impact is disclosed under Note 22(ii). The other amendments listed above did not have any impact on the amount recognised in prior periods and are not expected to significantly affect the current or future periods.

3. Significant accounting policies

3.1.1 Basis of preparation and presentation

The financial statements have been prepared on the historical cost basis as explained in the accounting policies as stated below,except the following that are measured at fair values at the end of each reporting period:

- Certain financial asset and liabilities (including derivate instruments) and contingent consideration is measured at fair value
- Assets held for sale - measured at fair value less cost to sell
- Defined benefit plan - plan measured at fair value
- Share based payments

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation(based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The financial statements of all entities used for the purpose of consolidation are drawn up to same reporting date as that of the Parent company, i.e., year ended on 31st March 2019. When the end of the reporting period of the Parent is different from that of a subsidiary, the subsidiary prepares, for consolidation purposes, additional financial information as of the same date as the financial statements of the Parent to enable the Parent to consolidate the financial information ofthe subsidiary, unless it is impracticable to do so.

3.1.2 Basis of consolidation

3.1.2.1 Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control is acquired until the date on which control ceases to exist.

The acquisition method of accounting is used to account for business combinations by the Group. The Group combines the financial statements of the Parent and its subsidiaries line by line adding together like items of assets, liabilities, equity, income and expenses. Inter-Group transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the Consolidated Statement of Profit and Loss, consolidated statement of changes in equity and Balance Sheet respectively.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed.

If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date.

If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in OCI and accumulated in equity as capital reserve. However, if there is no clear evidence of bargain purchase, the entityrecognises the gain directly in equity as capital reserve, without routing the same through OCI.After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

3.1.2.2 Associates and Joint ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The considerations made in determining whether significant influence or joint control are similar to those necessary to determine control over the subsidiaries.

The Group's investments in its associate and joint venture are accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment individually.

The Statement of Profit and Loss reflects the Group's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown on the face of the Statement of Profit and Loss.

3.1.2.3 Foreign currency translation

The consolidated financial statements are presented in Indian Rupee, which is the CUMI's functional and presentation currency and includes the financial position and results in respect of foreign operations, initially measured using the currency of the primary economic environment in which the entity operates (i.e their functional currency) and translated as follows:

- Assets and liabilities are translated at the closing rate at the date of that Balance Sheet;
- income and expenses are translated at average exchange rates;
- All resulting exchange differences are recognised in other comprehensive income;

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

3.2 Use of estimates and judgements

In preparing these financial statements, management has made judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

3.2.1 Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

3.2.2 Judgements are made in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements.

3.2.3 Assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment are reviewed on an ongoing basis.

The areas involving critical estimates or judgements are:

S.No	Particulars	Note
I	Estimation of useful life of tangible and intangible asset	3.11 & 3.12
II	Impairment test of Goodwill: Key assumption underlying recoverable amounts	5A
III	Assessment of control over components and consolidation decisions and classification of Associate	6A
IV	Assessment of control over components and consolidation decisions and classification of joint arrangements	6B
V	Estimation of fair value of unlisted securities	6C
VI	Recognition of deferred tax assets: Availability of future taxable profit against which tax losses carried forward can be used.	8
VII	Impairment of Trade receivables: Expected credit loss	11
VIII	Recognition and measurement of provisions and contingencies; key assumption about the likelihood and magnitude of an outflow of resources.	17 & 33
IX	Measurement of defined benefit obligation: Key actuarial assumptions.	34

3.3 Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sale of such assets and its sales is highly probable.

Non-current assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

3.4 Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured, regardless of when the payment is being made.

Revenue is measured at the transaction price for each separate performance obligation, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. The transaction price is net of estimated customer returns, rebates and other similar allowances.

The specific recognition criteria described below must also be met before revenue is recognised

3.4.1 Sale of goods

Revenue from the sale of goods is recognized at a point in time when the control of the products has transferred which generally coincides with dispatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales.

Revenue from the sale of goods is recognised when the control of the product is transferred, the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- the Group has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The Group has a present right to payment for the asset
- The Group has transferred physical possession of the asset, whereby the customer has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset or to restrict the access of other entities to those benefits.

When the consideration is received, before the Group transfers a goods to the customer, the Group shall present the consideration as a contract liability.

3.4.2 Rendering of services

Revenue from divisible service contracts

a) service contracts are recognised over a period of time determined using the percentage completion method, synchronized to the billing schedules agreed by the customers, identical with others in similar business and

b) the revenue relating to of supplies are measured in line with policy set out in 3.4.1

In respect of indivisible contracts, the revenues are recognised over a period of time, measured as per (a) above.

When the consideration is received, before the Group transfers a goods to the customer, the Group shall present the consideration as a contract liability and when the services rendered by the Group exceed the payment, a contract asset is recognised excluding any amount presented as receivable.

3.4.3 Other income

Royalty income is recognised on an accrual basis in accordance with the substance of the relevant agreement.

Dividend income from investments is recognised when the shareholder'sright to receive payment has been established.

Interest income from a financial asset is recognised and accrued using effective interest rate method.

Rental income is recognised on a straight line basis in accordance with the agreement.

3.5 Foreign Currencies

Foreign currency transactions are recorded at the rates of exchange prevailing on the date of the transactions. Monetary assets and liabilities outstanding at the year-end are translated at the rate of exchange prevailing at the year-end and the gain or loss, is recognised in the Statement of Profit and Loss.

Foreign currency monetary items (other than derivative contracts) of the respective Company, outstanding at the Balance Sheet date are restated at the year-end rates. Non-monetary items of the respective Company are carried at historical cost.

Exchange differences arising on settlement / restatement of short-term foreign currency monetary assets and liabilities of the respective Company are recognised as income or expense in the Statement of Profit and Loss.

Premium / discount on forward exchange contracts are amortised over the period of the contracts if such contracts relate to monetary items as at the Balance Sheet date. Any profit or loss arising on cancellation or renewal of such a forward exchange contract is recognised as income or as expense in the period in which such cancellation or renewal is made.

Refer Note: 3.26 and 3.27 for accounting for forward exchange contracts relating to firm commitments and highly probable forecast transactions.

3.6 Borrowing costs

The borrowing costs (other than those attributable to fixed assets - Refer Note: 4 and 5) are recognised in profit or loss in the period in which they are incurred.

Interest income earned on temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

3.7 Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related cost for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred revenue in the Balance Sheet and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable.

The benefit of a government loan at a below market rate of interest is treated as a government grant, measured as the differences between proceeds received and the fair value of the loan based on prevailing market interest rate.

3.8 Employee benefits

3.8.1 Retirement benefit costs and termination benefits

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gain and loss, the effect of the changes to asset ceiling (if applicable) and the return on plan assets (excluding net interest), is reflected immediately in the Balance Sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Re-measurement recognised in other comprehensive income is reflected in retained earnings and is not reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of plan amendment. Net interest is calculated by applying the rate at the beginning of the period to the net defined benefit liability or asset.

Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income;
- remeasurement.

The Group presents the first two components of defined benefit costs in profit or loss in the line item 'Employee benefit expense'. Curtailment gain and loss are accounted for as past service costs.

A liability for a termination benefit is recognised at the earlier of which the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

3.8.2 Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date.

3.8.3 Voluntary retirement compensation

Compensation to employees who have retired under voluntary retirement scheme is charged off to revenue

3.9 Share-based payment arrangements

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date. Details regarding the determination of the fair value of equity settled share based transactions are set out in Note: 36 of Standalone financial statements.

The fair value determined at the grant date of the equity-settled-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity. At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflect the revised estimate, with a corresponding adjustment to the Share options outstanding account.

3.10 Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

3.10.1 Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from 'profit before tax' as reported in the Statement of Profit and Loss because of items of income or expense that are taxable or deductible in other years (Temporary differences) and items that are never taxable or deductible (Permanent differences). Current tax is calculated using tax rates that have been enacted, at the reporting date in the countries where the Group operates and generates taxable income.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities.

Current income tax relating to items recognised outside profit or loss is either in other comprehensive income or in equity. Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

3.10.2 Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary differences arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised either in other comprehensive income or in equity. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

3.10.3 Indirect taxes

GST/CENVAT/VAT credit on materials purchased / services availed for production / Input services are taken into account at the time of purchase. Service tax input credit is accounted for in the books in the period in which the underlying service received is accounted and when there is no uncertainty in availing/utilising the credits. GST/CENVAT/VATCredit on purchase of capital items wherever applicable are taken into account as and when the assets are acquired. The GST/CENVAT credits so taken are utilised for payment of GST on supply and service/excise duty on goods manufactured or for payment of service tax on services rendered. The unutilised GST/CENVAT/VAT credit is carried forward in the books.

3.11 Property, plant and equipment

Land and buildings held for use in the production or supply of goods or services, or for administrative purposes, are stated in the Balance Sheet at cost less accumulated depreciation and accumulated impairment losses. Freehold land is not depreciated.

Fixtures and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Depreciation is recognised so as to write off the cost of the assets (other than freehold land) less their residual values over their useful lives as specified under Schedule II and applicable statutes of the relevant territories, using the straight-line method. The estimated useful lives, residual value and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance lease are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

Buildings on lease hold land are depreciated over the lease period if it is lower than the useful life mentioned in Schedule II.

Individual asset costing less than Rs.5000 are depreciated in full in the year of acquisition.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sale proceeds and the carrying amount of the asset and is recognised in profit or loss.

When significant parts of plant and equipment are required to be replaced at intervals, the Group depreciates them separately basedon their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement when the asset is derecognised.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

3.12 Intangible assets

3.12.1 Intangible assets acquired separately

Intangible assets that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The amortisation expense on intangible assets with finite lives is recognised in the Statement of Profit and Loss unless such expenditure forms part of carrying value of another asset.

3.12.2 Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

3.12.3 Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognised separately from goodwill are initially recognised at their fair value at the acquisition date, which is regarded as their cost.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

3.12.4 Derecognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gain or loss arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

3.13 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amount of tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the assets is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is higher of fair value less cost of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generated unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

3.14 Cash and cash equivalents (for purposes of Cash Flow Statement)

Cash comprises cash on hand and demand deposits with banks. Cash equivalents are short-term balances (with an original maturity of three months or less from the date of acquisition), highly liquid investments that are readily convertible into known amounts of cash and which are subject to insignificant risk of changes in value.

3.15 Cash Flow Statement

Cash flows are reported using the indirect method, whereby profit/(loss) before tax is adjusted for the effects of transactions of non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Group are segregated based on the available information.

3.16 Inventories

Inventories are stated at the lower of cost and net-realisable value. Cost includes freight, taxes and duties net of GST/CENVAT/VAT credit wherever applicable. Customs duty payable on material in bonded warehouse is added to the cost.

In respect of raw materials, stores and spare parts, traded stock cost is determined on weighted average basis. In respect of work in progress and finished goods, cost includes all direct costs and applicable production overheads, to bring the goods to the present location and condition. Net realisable value represents the estimated selling price for inventories less all estimated cost of completion and cost necessary to make the sale.

3.17 Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle present obligation at the end of reporting period, taking into account the risk and uncertainty surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of these cash flows (when the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of receivable can be measured reliably.

3.18 Contingent liabilities

Contingent liability is disclosed for (i) Possible obligation which will be confirmed only by future events not wholly within the control of the Group or (ii) Present obligations arising from past events where it is not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount of the obligation cannot be made. Contingent assets are not recognised in the financial statements.

3.19 Financial instruments

Financial assets and financial liabilities are recognised when the Group becomes a party to the contractual provision of the instruments. Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial asset or financial liabilities, as appropriate, on initial recognition. Transaction cost directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

3.20 Financial assets

All regular way purchases or sale of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sale of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

All recognised financial assets are subsequently measured in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

3.20.1 Classification of financial assets

Debt instruments that meet the following conditions are subsequently measured at amortised cost (except for debt instruments that are designated as at fair value through profit or loss on initial recognition):

- the asset is held within business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instruments give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For the impairment policy on financial assets measured at amortised cost, Refer Note: 3.20.4

3.20.2 Investment in equity instruments at Fair value through Other Comprehensive Income [FVTOCI]

On initial recognition, the Group can make an irrevocable election (on an instrument- by instrument basis) to present the subsequent changes in fair value in other comprehensive income pertaining to investment in equity instruments. This election is not permitted if the equity investment is held for trading.

These elected investments are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gain and loss arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instrument through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on disposal of the investments.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term.
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument or a financial guarantee.

The Group has equity instrument in two entities, which are not held for trading. The Group has elected the FVTOCI irrevocable option for both of these investments (Refer Note: 6C). Fair value is determined in the manner described in Note: 35.

Dividend on these investments are recognised in profit or loss when the Group's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity, which does not represent a recovery of part of cost of the investment and the amount of dividend can be measured reliably. Dividend recognised in profit and loss is included in 'Other income' line item.

3.20.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Group irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading (Refer Note: 3.20.2).

Debt instruments that do not meet the amortised cost criteria or FVTOCI criteria are measured at FVTPL. In addition, debt instruments that meet the amortised cost criteria or the FVTOCI criteria but are designated as at FVTPL are measured at FVTPL.

A financial asset that meets the amortised cost criteria or debt instruments that meet the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gain or loss on them on different bases. The Group has not designated any such debt instrument as at FVTPL. Financial asset at FVTPL is measured at fair value at the end of eachreporting period, with gains or losses arising on re-measurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporate any dividend or interest earned on the financial asset and is included in the 'Other income' line item. Dividend on financial asset at FVTPL is recognised when the Group's right to receive the dividends is established. It is probable that the economic benefits associated with the dividend will flow to the Group which does not represent a recovery of part of cost of the investment and the amount can be measured reliably.

3.20.4 Impairment of financial assets

The Group applied the expected credit loss model for recognising impairment loss on financial assets measured at amortised cost debt instruments at FVTOCI, lease receivable, trade receivable, other contractual rights to receive cash or other financial asset, and financial guarantees not designated as at FVTPL.

Expected credit losses are the weighted average of credit losses with the respective risks of default occurring as the weights. Credit loss is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive (i.e., all cash shortfalls), discounted at the original effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impairment financial assets). The Group estimates cash flows by considering all contractual terms of the financial instrument (for example, prepayments, extension, call and similar options) through the expected life of that financial instrument.

The Group measures the loss allowance for the financial instruments at an amount equal to the lifetime expected credit losses if the credit risk on those financial instruments has increased significantly since initial recognition. If the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instruments at an amount equal to 12 month expected credit losses. The twelve months expected credit losses are a portion of the lifetime cash shortfalls that will result if default occurs within 12 months after the reporting date and thus, are not cash shortfalls that are predicted over 12 months.

If the Group measured loss allowance for the financial instruments at life time expected credit loss model in the previous period, but determines at the end of a reporting period that the credit risk has not increased significantly since initial recognition due to improvement in credit quality as compared to the previous period, the Group again measures the loss allowance based on 12 month expected credit losses.

When making the assessment of whether there has been a significant increase in credit risk since initial recognition, the Group uses the change in the risk of a default occurring over the expected life of the financial instruments instead of the change in the amount of expected credit losses. To make the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increase in credit risk since initial recognition.

For trade receivables or any contractual rights to receive cash or other financial assets that results from transactions that are within the scope of Ind AS 115, the Group always measures the loss allowance at an amount equal to life time expected credit losses.

Further, for the purposes of measuring lifetime expected credit loss allowance for trade receivables, the Group has used a practical expedient as permitted under Ind AS 109. This expected credit loss allowance is computed based on a provision matrix which takes into account historical credit loss experience and adjusted for forward-looking information.

The impairment requirements for the recognition and measurement of a loss allowance are equally applied to debt instruments at FVTOCI except that the loss allowance is recognised in other comprehensive income and is not reduced from the carrying amount in the Balance Sheet.

3.20.5 Derecognition of financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Group neither transfers nor retains subsequently all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for the amount it may have to pay.

If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss if such gain or loss would have otherwise been recognised in profit or loss on disposal of that financial asset.

On derecognition of a financial asset other than its entirety (eg., when the Group retains an option to repurchase part of a transferred asset), the Group allocates the previous carried over amount of financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer.

The difference between the carrying amount allocated to the part that is no longer recognised and the sum of consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in profit or loss on disposal of that financial asset. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair value of those parts.

3.20.6 Foreign exchange gain and loss

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period.

- for Foreign currency denominated financial asset measured at amortised cost and FVTPL, the exchange differences are recognised in profit or loss except for those which are designated hedging instruments in a hedging relationship.
- Changes in the carrying amount of investments in equity instruments at FVTOCI relating to changes in foreign currency rates are recognised in other comprehensive income.
- For the purposes of recognising foreign exchange gain and loss, FVTOCI debt instruments are treated as financial assets measured at amortised cost. Thus, the exchange differences on the amortised cost are recognised in profit or loss and other changes in the fair value of FVTOCI financial asset are recognised in other comprehensive income.

3.21 Financial liabilities and equity instruments

3.21.1 Classification as debt or equity

Debt and equity instruments issued by a Group are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definition of a financial liabilities and an equity instrument.

3.21.2 Equity instruments

An equity instrument is a contract that evidences a residual interest in the asset of an entity after deducting all of its liabilities. Equity instruments issued by a Group are recognised at the proceeds received,net of direct issue costs.

3.21.3 Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest methods or at FVTPL.

However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, financial guarantee contracts issued by the Group, and commitments issued by the Group to provide a loan at below-market interest rate are measured in accordance with the specific accounting policies set out below:

3.21.3.1 Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either contingent consideration recognised by the Group as an acquirer in a business combination to which Ind AS 103 applies or is held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition, it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration recognised by the Group as an acquirer in a business combination to which Ind AS 103 applies, may be designated as at FVTPL upon initial recognition if:

- Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise.
- the financial liability forms part of a group of financial asset or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind AS 109 permits the entire combined contracts to be designated as at FVTPL in accordance with Ind AS 109.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on re-measurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in the 'Other income' line item.

However, for not-held for trading financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of the liability recognised in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss, in which case these effect of changes in credit risk are recognised in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognised in other comprehensive income are reflected immediately in retained earnings and are not subsequently reclassified to profit or loss.

Gain or loss on financial guarantee contract and loan commitments issued by the Group that are designated by the Group as at fair value through profit or loss are recognised in profit or loss.

Fair value is determined in the manner described in Note: 35.

3.21.3.2 Financial liabilities subsequently measured at amortised cost

Financial liabilities are not held-for-trading and are not designated as at FVTPL are measured at amortised cost at the end of subsequent accounting periods. The carrying amounts of financial liabilities that are subsequently measured at amortised cost are determined based on the effective interest method. An interest expense that is not capitalised as part of cost of an asset is included in the 'Finance cost' line item.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability or, (where appropriate), a shorter period, to the net carrying amount on initial recognition.

3.21.3.3 Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument. Financial guarantee contracts issued by a Group are initially measured at their fair value and, if not designated as at FVTPL, are subsequently measured at a higher of:

- the amount of loss allowance determined in accordance with impairment requirement of Ind AS 109; and
- the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of Ind AS 115.

3.21.3.4 Foreign exchange gain and loss

For financial liabilities that are denominated in a foreign currency and are measured at amortised cost at the end of each reporting period, the foreign exchange gain and loss are determined based on the amortised cost of the instruments and are recognised in 'Other income'.

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. For financial liabilities that are measured at FVTPL, the foreign exchange component forms part of the fair value gain or loss and is recognised in profit or loss.

3.21.3.5 Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. An exchange between a lenders of debt instruments with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, a substantial modification of the terms of an existing financial liability (whether or not attributable to the financial difficulty of the debtor) is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

3.22 Segment reporting

The accounting policies adopted for Segment reporting are in line with the accounting policies of the Group with the following additional policies:

- Inter-segment revenue is accounted on the basis of transactions which are primarily determined based on market/fair value factors.
- Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities of the Segment. Revenue and expenses, which relate to the enterprise as a whole and are not allocable to Segments on a reasonable basis have been included under "Un-allocated Corporate expenses".

3.23 Leases

Assets leased in its capacity as a lessee, where substantially all the risks and rewards of ownership vest are classified as finance leases. Such leases are capitalised at the inception of the lease at the lower of the fair value and the present value of the minimum lease payments and a liability is created for an equivalent amount. Each lease rental paid is allocated between the liability and the interest cost so as to obtain a constant periodic rate of interest on the outstanding liability for each year.

3.24 Earnings per share

Basic earnings per share is computed by dividing the profit/(loss) after tax attributable to the Parent shareholder by the weighted average number of equity shares outstanding during the year. Diluted earnings per share is computed by dividing the profit/(loss) after tax attributable to the Parent shareholder as adjusted for dividend, interest and other charges to expense or income relating to the dilutive potential equity shares, by the weighted average number of equity shares considered for deriving basic earnings per share and the weighted average number of equity shares which could have been issued on the conversion of all dilutive potential equity shares.

Potential equity shares are deemed to be dilutive only if their conversion to equity shares would decrease the net profit per share from continuing ordinary operations. Potential dilutive equity shares are deemed to be converted as at the beginning of the period, unless they have been issued at a later date. The dilutive potential equity shares are adjusted for the proceeds receivable had the shares been actually issued at fair value (i.e. average market value of the outstanding shares). Dilutive potential equity shares are determined independently for each period presented. The number of equity shares and potentially dilutive equity shares are adjusted for share splits/reverse share splits and bonus shares, as appropriate.

3.25 Research and Development

All revenue expenditure related to research and development are charged to the respective heads on the Statement of Profit and Loss. Capital expenditure incurred on research and development is capitalised as fixed assets and depreciated in accordance with the depreciation policy of the Group.

3.26 Derivative financial instruments

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently re-measured to their fair values at the end of each reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivate is designated and effective as hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedging relationship and the nature of the hedged item.

3.27 Hedge accounting

The Group designates certain hedging instruments, which includes derivatives and non-derivatives in respect of foreign currency risk, at either fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm Commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk. Note: 35 sets out details of the fair values of the derivatives instruments used for hedging purposes.

3.27.1 Fair value hedges

Changes in fair value of the designated portion of derivatives that qualify as fair value hedges are recognised in profit or loss immediately, together with any changes in the fair value of the hedging asset or liability that are attributable to the hedged risk. The change in the fair value of the designated portion of hedging instrument and the change in the hedged item attributable to the hedged risk are recognised in profit or loss in the line item relating to the hedged item.

Hedge accounting is discontinued when the hedging instruments expires or is sold, terminated, or exercised, or when it no longer qualify for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.

3.27.2 Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, and is included in the 'Other income' line item.

Amount previously recognised in other comprehensive income and accumulated in equity relating to (effective portion as described above) are reclassified to profit or loss in the periods when the hedged item affect profit or loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of non-financial asset or a non-financial liability, such gain or loss are transferred from equity (but not as a reclassification adjustment) and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

In cases, where the designated hedging instruments are options and forward contracts, the Group has an option, for each designation, to designate on an instrument only the changes in intrinsic value of the option and spot element of forward contract respectively as hedges. In such cases the time value of the options is accounted based on the type of hedged item which those options hedge.

In case of transaction related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e., Reserve for time value of option and forward elements of forward contract in hedging relationship. This separate component is removed and directly included in the initial cost or other carrying amount of the asset or the liability (i.e. not as a reclassification adjustment thus not affecting other comprehensive income) if the hedged item subsequently results in recognition ofa non-financial asset or non-financial liability. In other cases, the amount accumulated is reclassified to profit or loss as a reclassification adjustment in the same period in which the hedged expected future cash flow affects profit or loss.

In case of time period related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e.., Reserve for time value of options and forward elements of forward contracts in hedging relationship. The time value of options at the date of designation of the options in the hedging relationship is amortised on a systematic and rational basis over the period during which the options intrinsic value could affect profit or loss. This is done as a reclassification adjustment and hence affects other comprehensive income.

In cases where only the spot element of the forward contracts is designated in a hedging relationship and the forward element of the forward contract is not designated, the Group makes the choice for each designation whether to recognise the changes in forward element of fair value of the forward contracts in profit or loss or to account for this element similar to the time value of option (as described above).

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting.

Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecasted transactions is ultimately recognised in profit or loss. When a forecasted transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

3.28 Insurance claims

Insurance claims are accounted for on the basis of claims admitted/ expected to be admitted and to the extent that the amount recoverable can be measured reliably and it is reasonable to expect ultimate collection.

3.29 Operating cycle

Based on the nature of the products/activities of the Group and the normal time between acquisition of assets and their realisation in cash or cash equivalents, the Group has determined its operating cycle as 12 months for the purpose of classification of its assets and liabilities as current and non-current.

4. Property, plant and equipment

Particulars	As at	
	31.03.2019	31.03.2018
A. Carrying amounts		
Freehold land	103.42	105.32
Buildings	1831.17	1896.81
Plant and equipment	3615.62	4000.32
Furniture and fittings	53.51	61.07
Vehicles	78.28	66.94
Vehicles under finance lease	5.34	13.55
	5687.34	**6144.01**
B. Capital work-in-progress	**463.88**	**302.51**

Cost	Freehold land	Buildings (a)	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
Balance at March 31, 2017	**105.10**	**1979.41**	**5282.00**	**103.08**	**88.71**	**35.33**	**7593.63**
Additions **(b)**	-	171.09	1148.74	13.89	27.55	1.99	1363.26
Disposals	-	(4.35)	(74.39)	(7.85)	(3.48)	(2.38)	(92.45)
Translation differences	0.22	(1.16)	6.45	0.25	0.80	-	6.56
Balance at March 31, 2018	**105.32**	**2144.99**	**6362.80**	**109.37**	**113.58**	**34.94**	**8871.00**
Additions **(b)**	-	71.32	598.05	8.88	34.45	-	712.70
Disposals	-	-	(18.10)	(2.91)	(10.88)	(11.65)	(43.54)
Translation differences	(1.90)	(45.37)	(109.47)	(0.30)	(4.30)	-	(161.34)
Balance at March 31, 2019	**103.42**	**2170.94**	**6833.28**	**115.04**	**132.85**	**23.29**	**9378.82**

Accumulated depreciation and impairment	Freehold land	Buildings	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
Balance at March 31, 2017	**-**	**156.24**	**1538.39**	**36.53**	**31.08**	**13.66**	**1775.90**
Depreciation expense	-	92.81	881.71	19.50	17.10	9.21	1020.33
Eliminated on disposals	-	(1.31)	(59.47)	(7.82)	(2.37)	(1.48)	(72.45)
Translation differences	-	0.44	1.85	0.09	0.83	-	3.21
Balance at March 31, 2018	**-**	**248.18**	**2362.48**	**48.30**	**46.64**	**21.39**	**2726.99**
Depreciation expense	-	96.29	911.71	16.30	16.26	7.17	1047.73
Eliminated on disposals	-	-	(12.21)	(2.82)	(5.80)	(10.61)	(31.44)
Translation differences	-	(4.70)	(44.32)	(0.25)	(2.53)	-	(51.80)
Balance at March 31, 2019	**-**	**339.77**	**3217.66**	**61.53**	**54.57**	**17.95**	**3691.48**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Carrying amounts	Freehold land	Buildings	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
Balance at March 31, 2017	**105.10**	**1823.17**	**3743.61**	**66.55**	**57.63**	**21.67**	**5817.73**
Additions	-	171.09	1148.74	13.89	27.55	1.99	1363.26
Depreciation expense	-	(92.81)	(881.71)	(19.50)	(17.10)	(9.21)	(1020.33)
Disposals (net)	-	(3.04)	(14.92)	(0.03)	(1.11)	(0.90)	(20.00)
Translation differences	0.22	(1.60)	4.60	0.16	(0.03)	-	3.35
Balance at March 31, 2018	**105.32**	**1896.81**	**4000.32**	**61.07**	**66.94**	**13.55**	**6144.01**
Additions	-	71.32	598.05	8.88	34.45	-	712.70
Depreciation expense	-	(96.29)	(911.71)	(16.30)	(16.26)	(7.17)	(1047.73)
Disposals (net)	-	-	(5.89)	(0.09)	(5.08)	(1.04)	(12.10)
Translation differences	(1.90)	(40.67)	(65.15)	(0.05)	(1.77)	-	(109.54)
Balance at March 31, 2019	**103.42**	**1831.17**	**3615.62**	**53.51**	**78.28**	**5.34**	**5687.34**

Capital work in progress movement	Total
Balance at March 31, 2017	**725.64**
Addition during the year	940.13
Capitalised during the year	(1363.26)
Balance at March 31, 2018	**302.51**
Addition during the year	874.07
Capitalised during the year	(712.70)
Balance at March 31, 2019	**463.88**

(a) Includes ₹760.08 million (Previous year: ₹729.86 million) being cost of building on leasehold land.

(b) Includes Research and Development capital expenditure of ₹38.28 million (Previous year: ₹26.54 million) - Refer Note: 39(b) on Research & Development expenditure.

(c) Capitalised borrowing cost:

Borrowing costs capitalised on property, plant and equipment during the year ₹Nil (Previous year: ₹Nil).

(d) Assets pledged as security:

Immovable properties of the Parent carry pari-passu charge in favour of the consortium of bankers as security for banking facilities availed.

Plant & Machinery relating to a domestic subsidiary carry a charge in favour of a banker as security for the Term Loan availed.

The vehicles purchased through finance lease arrangement are hypothecated to the lessor.

(e) Contractual obligations:

Refer Note: 33B for disclosure of Contractual commitments for acquisition of property, plant and equipment.

(f) Vehicles under finance lease:

Refer Note: 37 for disclosure requirements relating to Vehicles under finance lease.

5A. Goodwill on Consolidation

Particulars	As at	
	31.03.2019	31.03.2018
Cost or deemed costs	1260.16	1188.75
Accumulated impairment losses	(37.34)	(37.34)
	1222.82	**1151.41**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	As at	
	31.03.2019	31.03.2018
Balance at beginning of the year	1151.41	1147.95
Add: Exchange difference during the year on translation of goodwill of foreign subsidiaries	71.41	3.46
	1222.82	**1151.41**

Total carrying amount of recoverable goodwill is based upon value in use and not based on fair value less cost of disposal.

Accumulated Impairment losses

The carrying amount of goodwill as at the year ended March 31, 2019 comprise of the goodwill initially recognised at the time of acquisition of Volzhsky Abrasives Works [VAW] & the balance relate to the goodwill recognised on acquisition of other subsidiaries.

(i) Goodwill recognised at the time of acquisition of Volzhsky Abrasives Works [VAW]

The goodwill recognised at the time of acquisition of VAW represents the significant portion of the total goodwill carried by the Group. This arose when VAW was acquired by the Group through its wholly owned subsidiary in FY 2007-08. The value in use is arrived at by discounting the cash flow projections using the financial budgets covering a period of three years, approved by the Board of directors of VAW and extrapolating it beyond three years using a growth rate of 5% p.a. The cash flows have been discounted using a rate of 15.1% p.a. This growth rate does not exceed the long term average growth rate. The Group believes that any reasonable further change in the key assumptions on which recoverable amount is based, would not cause the carrying amount to exceed its recoverable amount.

(ii) Goodwill recognised at the time of acquisition of other entities

This represents the goodwill recognised on the acquisition of other subsidiaries viz., Sterling Abrasives Ltd., Southern Energy Development Corporation Ltd. and CUMI (Australia) Pty Ltd. The aggregate values of the same are not significant. The Group believes that the carrying amount of the goodwill is recoverable.

5B. Other Intangible assets

Particulars	As at	
	31.03.2019	31.03.2018
(i) Carrying amounts		
Software	23.37	20.66
Technical know-how	16.67	40.37
Total	**40.04**	**61.03**
(ii) Intangible assets under development	**-**	**0.29**

Cost	Software	Technical know-how	Total
Balance at March 31, 2017	**32.18**	**125.35**	**157.53**
Additions **(a)**	18.28	-	18.28
Translation differences	-	(0.01)	(0.01)
Balance at March 31, 2018	**50.46**	**125.34**	**175.80**
Additions **(a)**	13.86	0.20	14.06
Disposals	(0.20)	-	(0.20)
Translation differences	-	(0.09)	(0.09)
Balance at March 31, 2019	**64.12**	**125.45**	**189.57**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Accumulated amortisation and impairment	Software	Technical know-how	Total
Balance at March 31, 2017	**19.03**	**56.12**	**75.15**
Amortisation expense	10.77	28.85	39.62
Balance at March 31, 2018	**29.80**	**84.97**	**114.77**
Amortisation expense	11.15	23.83	34.98
Disposals	(0.20)	-	(0.20)
Translation differences	-	(0.02)	(0.02)
Balance at March 31, 2019	**40.75**	**108.78**	**149.53**

Carrying amounts	Software	Technical know-how	Total
Balance at March 31, 2017	**13.15**	**69.23**	**82.38**
Additions	18.28	-	18.28
Amortisation expense	(10.77)	(28.85)	(39.62)
Translation differences	-	(0.01)	(0.01)
Balance at March 31, 2018	**20.66**	**40.37**	**61.03**
Additions	13.86	0.20	14.06
Amortisation expense	(11.15)	(23.83)	(34.98)
Disposals (net)	-	-	-
Translation differences	-	(0.07)	(0.07)
Balance at March 31, 2019	**23.37**	**16.67**	**40.04**

(a) Includes Research & Development capital expenditure of ₹Nil (Previous year: ₹0.02 million) - Refer Note: 39(b) on Research & Development expenditure.

6A. Investments in Associate

Particulars	As at			
	31.03.2019		31.03.2018	
	No. of shares	Amount	No. of shares	Amount
Wendt (India) Ltd. [WENDT]	797352	519.31	797352	484.89
Total Carrying value	**797352**	**519.31**	**797352**	**484.89**
Book value of Quoted Investment		519.31		484.89
Market value of Quoted Investment		2361.96		1946.73

Name of the Associate	Nature of business	Place of incorporation and principal place of business	Proportion of ownership's interest/voting rights held by the Group	
			As at	
			31.03.2019	31.03.2018
Wendt (India) Ltd.	Super abrasives	India	39.87%	39.87%

The Group has consolidated the above Associate using equity method.

Principal activities of the business: A leading manufacturer of Super Abrasives (Diamond and Cubic Boron Nitride), Special purpose Grinding machine and tools, offering functionally superior products and services for grinding and machining "Hard - To - process Materials".

Pursuant to shareholders' agreement, the Parent has the right to cast 39.87% of the votes at shareholders' meeting of Wendt (India) Ltd. The investment in this entity, is treated as an Associate, since in addition to the co-venturer (who holds similar stake as CUMI), general public also holds the remaining portion of shares. Hence the Group has not treated this investment as Joint venture investment.

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Summarised financial information of Associate

The summarised financial information given below represents amount shown in the Associate's consolidated financial statements prepared in accordance with Ind AS adjusted by the Group for equity accounting purposes.

Wendt (India) Ltd. Particulars	As at	
	31.03.2019	31.03.2018
Non-current assets	632.16	623.16
Current assets	1165.74	976.17
Non-current liabilities	(30.26)	(48.86)
Current liabilities	(465.07)	(334.23)

Particulars	for the year	
	2018-19	2017-18
Revenue	1645.52	1489.41
Profit for the year	154.13	131.24
Other Comprehensive Income	2.77	22.04
Total Comprehensive Income	156.91	153.28
Dividend received from WENDT	23.92	19.93

Reconciliation of the above summarised financial information to the carrying amount of the interest in Wendt (India) Ltd. recognised in consolidated financial statements is given below:

Particulars	As at	
	31.03.2019	31.03.2018
Net assets of WENDT	1302.57	1216.24
Proportion of the Group's ownership interest in WENDT	39.87%	39.87%
Carrying amount of the Group's interest in WENDT	519.31	484.89

Fair value of the Group's interest in Wendt (India) Ltd., which is listed in the Stock exchanges of India as on 31st March 2019 was ₹2361.96 million (as at March 31, 2018 ₹1946.73 million)

Particulars	As at	
	31.03.2019	31.03.2018
I. Contingent liabilities: Wendt (India) Ltd.		
a. Directly incurred by the Group	-	-
b. Share of the Group which have been incurred with other investors	-	-
c. Group's share in relation to its interest in Associate	-	-
II. Commitments - Capital: Wendt (India) Ltd.		
a. Directly incurred by the Group	-	-
b. Share of the Group which have been incurred with other investors	-	-
c. Group's share in relation to its interest in Associate	48.27	13.62

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6B. Investments in Joint Ventures

Name of the Joint Ventures	As at			
	31.03.2019		31.03.2018	
	No. of shares	Amount	No. of shares	Amount
Unquoted Investment - Equity shares				
Murugappa Morgan Thermal Ceramics Ltd. [MMTCL]	1430793	585.83	1430793	516.89
Ciria India Ltd. [CIRIA]	59998	95.67	59998	70.38
Total Carrying value		**681.50**		**587.27**
Aggregate value of unquoted investments		681.50		587.27

Details of the Group's Joint Ventures at the end of the reporting period are as follows:

Name of the Joint Ventures	Nature of business	Place of incorporation and principal place of business	Proportion of ownership's interest/ voting rights held by the Group	
			31.03.2019	31.03.2018
Murugappa Morgan Thermal Ceramics Ltd.	Ceramics	India	49%	49%
Ciria India Ltd.	Ceramics	India	30%	30%

Nature of Business:

a) MMTCL: Manufacture of complete range of ceramics fiber products.

b) CIRIA: Providing refractory engineering solutions and supply of refractory materials.

The Group has entered into Joint venture agreements with the co-venturer and hence the investment in the above entities are treated as Joint Venture. Both the venturers have joint control on the entities. Accordingly, the Group has consolidated the above Joint Ventures using equity method.

Summarised financial information of Joint Ventures:

The summarised financial information below represents the amount shown in the Joint Venture's financial statements prepared in accordance with Ind AS adjusted by the Group for equity accounting purposes.

Murugappa Morgan Thermal Ceramics Ltd.

Particulars	As at	
	31.03.2019	31.03.2018
Non-current assets	567.77	592.44
Current assets	844.28	720.00
Non-current liabilities	(22.84)	(22.30)
Current liabilities	(193.64)	(235.25)

The above amount of assets and liabilities includes the following:

Particulars	As at	
	31.03.2019	31.03.2018
Cash and cash equivalents	20.83	34.01
Current financial liabilities (excluding trade payables and provisions)	-	-
Non-current financial liabilities (excluding trade payables and provisions)	-	-

Particulars	For the year	
	2018-19	2017-18
Revenue	1528.44	1351.64
Profit for the year	214.33	145.94
Other Comprehensive Income	(3.24)	1.73
Total Comprehensive Income	211.09	147.67
Dividend received from MMTCL	28.62	71.54
The above profit for the year includes the following:		
Depreciation and amortisation	75.92	73.49
Interest income	0.05	1.07
Interest expense	-	-
Income tax expense	80.31	77.80

Reconciliation of the above summarised financial information to the carrying amount of the interest in Murugappa Morgan Thermal Ceramics Ltd. recognised in the consolidated financial statements is given below:

Particulars	As at	
	31.03.2019	31.03.2018
Net assets of MMTCL	1195.57	1054.89
Proportion of the Group's ownership interest in MMTCL	49%	49%
Carrying amount of the Group's interest in MMTCL	585.83	516.89

Ciria India Ltd.

Particulars	As at	
	31.03.2019	31.03.2018
Non-current assets	56.54	47.86
Current assets	467.32	437.71
Non-current liabilities	(7.77)	(6.70)
Current liabilities	(197.18)	(244.28)

The above amount of assets and liabilities includes the following:

Particulars	As at	
	31.03.2019	31.03.2018
Cash and cash equivalents	63.16	22.63
Current financial liabilities (excluding trade payables and provisions)	-	-
Non-current financial liabilities (excluding trade payables and provisions)	-	-

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	For the year	
	2018-19	2017-18
Revenue	886.07	771.78
Profit for the year	109.48	75.86
Other Comprehensive Income	(1.06)	0.18
Total Comprehensive Income	108.42	76.04
Dividend received from CIRIA	6.00	30.00
The above profit for the year includes the following:		
Depreciation and amortisation	9.28	8.43
Interest income	-	-
Interest expenses	2.12	-
Income tax expenses (income)	47.18	35.18

Reconciliation of the above summarised financial information to the carrying amount of the interest in Ciria India Ltd. recognised in the consolidated financial statements is given below:

Particulars	As at	
	31.03.2019	31.03.2018
Net assets of CIRIA	318.91	234.59
Proportion of the Group's ownership interest in CIRIA	30.00%	30.00%
Carrying amount of the Group's interest in CIRIA	95.67	70.38

Unrecognised share of losses of Joint Ventures: MMTCL & CIRIA

Particulars	For the year	
	2018-19	2017-18
The unrecognised share of loss on Joint Ventures for the year	-	-
Cumulative unrecognised share of loss of Joint Ventures	-	-

The Joint Ventures: Murugappa Morgan Thermal Ceramics Ltd. and Ciria India Ltd., cannot distribute its profits until it obtains the consent from both the Venturers.

Particulars	As at 31.03.2019		As at 31.03.2018	
	MMTCL	CIRIA	MMTCL	CIRIA
I. Contingent liabilities				
a. Directly incurred by the Group	-	-	-	-
b. Share of the Group which have been incurred along with other investors	-	-	-	-
c. Group's share in relation to its interest in Joint venture	9.41	0.65	11.90	0.65
II. Commitments - Capital				
a. Directly incurred by the Group	-	-	-	-
b. Share of the Group which have been incurred along with other investors	-	-	-	-
c. Group's share in relation to its interest in Joint venture	17.94	-	4.75	-

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

6C. Other Investments

Particulars	As at	
	31.03.2019	31.03.2018
(i) Non-current		
(a) Investment in Equity instruments at FVTOCI		
Quoted		
Coromandel Engineering Co. Ltd.	87.04	144.85
Unquoted		
Murugappa Management Services Ltd.	11.30	11.30
(b) Investments in Equity Instruments at FVTPL		
Quoted	4.51	3.81
Unquoted	0.28	0.33
Total (a+b)	**103.13**	**160.29**
Aggregate book value of quoted investments	91.55	148.66
Aggregate market value of quoted investments	91.55	148.66
Aggregate carrying value of unquoted investments	11.58	11.63
Aggregate amount of impairment in value of investments	-	-
(ii) Current		
Instruments at Fair Value Through Profit or Loss (FVTPL) - Mutual fund	**961.25**	**570.49**

Category wise other investments - as per Ind AS 109	As at	
	31.03.2019	31.03.2018
Financial asset measured at FVTPL - Equity instruments & Others	966.04	574.63
Financial asset measured at FVTOCI - Equity instruments	98.34	156.15
	1064.38	**730.78**

7. Other financial assets

Particulars	As at	
	31.03.2019	31.03.2018
A. Non-current		
Security deposits	**133.39**	**120.76**
B. Current		
Deposits	0.37	0.28
Advances to employees	19.32	12.78
Other receivables		
Considered good	50.94	41.60
Considered doubtful	0.61	1.11
Less: Allowance for doubtful receivables	(0.61)	(1.11)
	70.63	**54.66**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

8. Deferred tax assets (net) and Deferred tax liabilities (net)

Particulars	As at	
	31.03.2019	31.03.2018
A. Deferred tax assets (net)	101.05	109.64
B. Deferred tax liabilities (net)	355.42	383.15

Particulars	2018-19				
	Balance as at 31.03.2018	Recognised in Profit or Loss	Recognised in OCI	Translation adjustment	Balance as at 31.03.2019
A. Deferred tax assets (net)					
Allowance for doubtful receivables and advances	1.06	0.69	-	-	1.75
Expenses allowed on payment/realisation basis	20.65	(7.81)	-	(1.04)	11.80
Accelerated depreciation for tax purposes	(9.81)	35.74	-	1.98	27.91
Tax losses	66.99	(50.15)	-	(2.94)	13.90
Tax on Unrealised profit on stock	30.75	14.94	-	-	45.69
Total	**109.64**	**(6.59)**	**-**	**(2.00)**	**101.05**
B. Deferred tax liabilities (net)					
Allowance for doubtful receivables and advances	(31.75)	2.84	-	0.25	(28.66)
Voluntary retirement scheme payments	(0.64)	(0.04)	-	-	(0.68)
Expenses allowed on payment/realisation basis	(68.56)	9.62	-	1.01	(57.93)
Principal portion of finance lease rentals	(1.96)	0.46	-	-	(1.50)
Cash flow hedges	0.17	-	0.89	-	1.06
Tax on undistributed profit	97.68	7.06	-	-	104.74
Accelerated depreciation for tax purposes	388.21	(47.79)	-	(2.03)	338.39
Total	**383.15**	**(27.85)**	**0.89**	**(0.77)**	**355.42**
Movement during the year (B - A)	**273.51**	**(21.26)**	**0.89**	**1.23**	**254.37**

Particulars	2017-18				
	Balance as at 31.03.2017	Recognised in Profit or Loss	Recognised in OCI	Translation adjustment	Balance as at 31.03.2018
A. Deferred tax assets (net)					
Allowance for doubtful receivables and advances	0.68	0.38	-	-	1.06
Expenses allowed on payment/realisation basis	21.88	(2.63)	-	1.40	20.65
Accelerated depreciation for tax purposes	(12.50)	5.94	-	(3.25)	(9.81)
Tax losses	60.77	-	-	6.22	66.99
Tax on Unrealised profit on stock	19.15	11.60	-	-	30.75
Total	**89.98**	**15.29**	**-**	**4.37**	**109.64**
B. Deferred tax liabilities (net)					
Allowance for doubtful receivables and advances	(27.76)	(4.25)	-	0.26	(31.75)
Voluntary retirement scheme payments	(0.43)	(0.21)	-	-	(0.64)
Expenses allowed on payment/realisation basis	(54.56)	(13.91)	-	(0.09)	(68.56)
Principal portion of finance lease rentals	(1.69)	(0.27)	-	-	(1.96)
Cash flow hedges	1.50	-	(1.33)	-	0.17
Tax on undistributed profit	89.04	8.64	-	-	97.68
Accelerated depreciation for tax purposes	457.85	(69.16)	-	(0.48)	388.21
Total	**463.95**	**(79.16)**	**(1.33)**	**(0.31)**	**383.15**
Movement during the year (B - A)	**373.97**	**(94.45)**	**(1.33)**	**(4.68)**	**273.51**

(a) Tax losses in respect of subsidiaries where the foreseeable business profits are estimated reasonably in the near future is considered for recognition of deferred tax assets in respective entities in compliance with tax laws of the respective countries.

(b) Deferred tax assets have not been recognised in respect of losses as they may not be used to offset taxable profit elsewhere in the Group, also they have arisen in subsidiaries that have been loss-making for some time and there are no other tax planning opportunities or other evidence of recoverability in the near future.

Notes forming part of the Consolidated Financial Statements

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9. Other assets

Particulars	As at	
	31.03.2019	31.03.2018
A. Non-current		
Capital advances	136.36	62.08
Prepayments	134.82	136.81
Deposits paid under protest relating to Sales tax, Central Excise and Service tax demands	15.45	16.53
Taxation (net of provisions)	83.09	95.49
	369.72	**310.91**
B. Current		
Prepayments	132.17	124.49
Trade advance to Supplier	194.65	210.30
Balances with Statutory authorities	196.60	172.32
	523.42	**507.11**

10. Inventories

Particulars	As at	
	31.03.2019	31.03.2018
Raw materials	2140.41	1551.08
Raw materials in transit	87.45	124.20
Work-in-progress	987.63	898.95
Stock-in-trade	560.99	633.32
Stock-in-trade in transit	35.84	63.37
Finished goods	808.87	530.26
Stores and spares	707.36	579.06
	5328.55	**4380.24**

a. The mode of valuation of inventories has been stated in Note: 3.16.

b. The cost of inventories recognised as an expense (consumption) during the year was ₹10933.34 million (Previous year: ₹9146.30 million).

c. All the above inventories are expected to be recovered within twelve months.

11. Trade receivables (Unsecured)

Particulars	As at	
	31.03.2019	31.03.2018
Current		
a. Considered good	5139.22	4750.60
b. Which have significant increase in Credit Risk	95.12	103.66
c. Credit impaired	-	-
Allowance for doubtful receivables (expected credit loss allowance)	(95.12)	(103.66)
	5139.22	**4750.60**

a. Trade receivables are generally due between 30 to 60 days. The Group's term includes charging of interest for delayed payment beyond agreed credit days. However, the entities under the Group exercises charging of interest after considering the historical trend, business prospects, reason for delay, market conditions etc.

b. Credit risk is managed at the respective entity level. The credit limit and credit period are fixed for each customer after evaluating the financial position, past performance, business opportunities, credit references etc. The entities under the Group may consider credit rating when needed. The credit limit and the credit period are reviewed regularly at periodical intervals..

c. Concentration risk considers significant exposures relating to industry, counterparty, geography, currency etc. The concentration of credit risk is not significant due to the fact that the customer base is large and diversified.

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d. The respective entities under the Group have used a practical expedient by computing the expected credit loss allowance for trade receivables based on provision matrix. The provision matrix takes into account historical credit loss experience and adjusted for forward looking information.

e. Some trade receivable may be past due over 365 days without being impaired considering the certainty of realisation.

f. Trade Receivable includes dues from related party amounting ₹61.39 million (Previous year: ₹86.27 million)

g. Movement in the expected credit loss allowance

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	103.66	101.57
Movement in the expected credit loss allowance on trade receivables calculated at life time expected credit losses	(8.54)	2.09
	95.12	**103.66**

12A. Cash and cash equivalents

Particulars	As at	
	31.03.2019	31.03.2018
Balances with banks	953.82	1256.21
Deposit account	4.27	18.74
Cash on hand	1.28	1.39
	959.37	**1276.34**

Non-cash transactions:

During the year, the Company has not entered into any non-cash transaction on investing and financing activities.

12B. Bank balances other than above

Particulars	As at	
	31.03.2019	31.03.2018
Earmarked funds	**15.70**	**12.76**

13. Equity Share Capital

Particulars	As at	
	31.03.2019	31.03.2018
Authorised share capital:		
387,250,000 (as at March 31, 2018: 387,250,000) equity shares of ₹1 each	387.25	387.25
Issued, Subscribed and Paid-up:		
189,154,175 (as at March 31, 2018: 188,955,751) equity shares of ₹1 each fully paid	189.15	188.96

a) Reconciliation of the shares outstanding at the beginning and at the end of the reporting period

Particulars	As at 31.03.2019		As at 31.03.2018	
Equity shares with voting rights	No. of Shares	Value of Shares	No. of Shares	Value of Shares
At the beginning of the year	188,955,751	188.96	188,658,090	188.66
Add: Shares issued against Employee Stock Option Scheme/Plan	198,424	0.19	297,661	0.30
At the end of the year	189,154,175	189.15	188,955,751	188.96

The Company had received share application money for 1500 shares under Employee Stock Option Scheme 2007, which was pending for allotment as at 31st March 2018 and has been allotted during FY 2018-19. Details of receipt/adjustment is show under "Other equity" - Refer Note no: 14C.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

b) Terms/Rights attached to Equity Shares

The Company has only one class of Equity shares having a par value of ₹1/- per share. Each holder of equity shares is entitled to one vote per share. Repayment of capital and surplus, will be in proportion to the number of equity shares held.

c) Dividend details

An interim dividend of ₹1.5/- per share was declared at the meeting of the Board of Directors held on February 01, 2019 and the same has been paid (previous year an interim dividend of ₹1/- per share was declared at the meeting of the Board of Directors held on February 14, 2018 and the same has been paid).

Final dividend of ₹1.25/- per share is proposed for the year ended March 31, 2019 (previous year final dividend of ₹1.25/- was proposed and paid). The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, upon which the liability will be recorded in the books.

d) Details of shares held by shareholders holding more than 5% of the aggregate shares in the Company

Name of Shareholder	As at			
	31.03.2019		31.03.2018	
	No. of Shares held	% of holding	No. of Shares held	% of holding
Ambadi Investments Ltd.	56,054,244	29.63%	56,054,244	29.67%
HDFC Trustee Company Ltd.	16,987,297	8.98%	16,873,797	8.93%

Holdings combined based on the PAN of the shareholders.

e) Stock Options granted under the Company's Employee Stock Option Scheme/Plan

Stock Options granted under the Company's Employee Stock Option Scheme/Plan pending exercise by Option holders carry no right to dividend and voting rights. Further details of the Employee Stock Option Scheme/Plan are provided in Note: 36 of Standalone Financial Statements.

14.Other equity

Particulars	As at	
	31.03.2019	31.03.2018
A. Reserves and Surplus		
a. Profit on Forfeiture of Shares/Warrants	6.03	6.03
b. Capital redemption reserve	27.68	27.68
c. Capital reserve on consolidation	750.33	706.77
d. Securities premium	254.11	226.19
e. General reserve	7230.94	6730.94
f. Share options outstanding account	46.69	30.84
g. Retained earnings	8734.26	7360.98
B. Items of Other Comprehensive Income		
h. Reserve for equity instruments	26.61	84.42
i. Effective portion of Cash flow Hedge	1.54	0.25
j. Foreign currency translation reserve	(50.06)	256.47
k. Revaluation surplus	23.74	23.74
C. Share application pending allotment		
l. Share application pending allotment	-	0.23
Total Other equity	**17051.87**	**15454.54**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

a. Profit on forfeiture of shares/warrants

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	6.03	6.03
Movements	-	-
Balance at end of the year	**6.03**	**6.03**

During 1999, an amount of ₹6.03 million has been added on account of forfeiture of shares in the Parent company. This balance can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Parent company.

b. Capital redemption reserve

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	27.68	27.68
Movements	-	-
Balance at end of the year	**27.68**	**27.68**

During the year 2000-01, the Company bought back 2,768,000 shares at the then face value of ₹10 each at the price of ₹115 per share from the shareholders, pursuant to the offer of buy back of shares. A sum equal to nominal value of shares so bought back was transferred to capital redemption reserve account as per Companies Act, 1956. This reserve can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Company.

c. Capital reserve on consolidation

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	706.77	704.65
Movements due to translation impact	43.56	2.12
Balance at end of the year	**750.33**	**706.77**

Capital reserve on consolidation was created on account of acquisition of step down subsidiary: Thukela Refractories Isithebe Pty Ltd.; Joint Ventures: MMTCL & CIRIA; and Associate: WENDT, since the consideration paid was lower than the net worth of the acquiring company on the date of acquisition. The balance in this reserve will get transferred at the time of disposal of the relevant investment.

d. Securities premium

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	226.19	194.15
Movements	27.92	32.04
Balance at end of the year	**254.11**	**226.19**

The Securities premium received during the year represents the premium received towards allotment of 198,424 shares. Cumulatively 2,446,175 equity shares were allotted during the period FY 2009-10 to FY 2018-19 under ESOP Scheme 2007 and ESOP Plan 2016 (Refer Note: 36 of Standalone Financial Statments towards details of the Scheme/Plan).

This balance will be utilised in accordance with the provisions of Section 52 of the Companies Act, 2013 towards issuance of fully paid bonus shares, write-off of preliminary expenses, commission / discount expenses on issue of shares / debentures, premium payable on redemption of redeemable preference shares / debentures and buy back of its own shares / securities under Section 68 of the Companies Act.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

e. General reserve

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	6730.94	6230.94
Movements: Transfer from retained earnings	500.00	500.00
Balance at end of the year	**7230.94**	**6730.94**

The general reserve is a free reserve, retained from Group's profits and can be utilized upon fulfilling certain conditions in accordance with statute of the relevant Act.

f. Share options outstanding account

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	30.84	16.08
Movements	15.85	14.76
Balance at end of the year	**46.69**	**30.84**

Under Ind AS 102, fair value of the options granted is to be expensed out over the life of the vesting period as employee compensation costs reflecting period of receipt of service. Refer Note: 36 of Standalone Financial Statements for details.

g. Retained earnings

Particulars	As at	
	31.03.2019	31.03.2018
Opening Balance	7360.98	6107.27
Add: Profits for the year	2476.78	2155.96
Less: Other Comprehensive Income arising from remeasurement of defined benefit obligation net of tax	19.16	5.99
Less: Transfer to General reserve	(500.00)	(500.00)
Less: Final dividend paid	(236.30)	(141.51)
Less: Dividend tax on Final dividend paid	(35.27)	(14.92)
Less: Interim dividend	(283.71)	(188.93)
Less: Dividend tax on Interim dividend	(44.22)	(20.31)
Less: Dividend tax on Subsidiaries & Joint ventures	(23.16)	(42.57)
	8734.26	**7360.98**

The amount that can be distributed by the Group as dividend to its equity shareholders is determined based on the financial position and dividend policy of the Group and in compliance with the applicable statutes.

h. Reserve for equity instruments

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	84.42	57.79
Movements	(57.81)	26.63
Balance at end of the year	**26.61**	**84.42**

This reserve represents the cumulative gains and losses arising on the revaluation of equity instruments measured at fair value through Other Comprehensive Income (Refer Note: 6C(i)), which will be reclassified to retained earnings when those assets are disposed off.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

i. Effective portion of Cash flow Hedge

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	0.25	1.82
Movements	1.29	(1.57)
Balance at end of the year	**1.54**	**0.25**

The hedging reserve represents the cumulative effective portion of gains or losses arising on changes in fair value of designated portion of hedging instruments entered into for cash flow hedges. The reserve will be reclassified to profit or loss when the hedged transaction impacts the profit or loss, or included as a basis adjustment to the non-financial hedged item.

j. Foreign currency translation reserve

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	256.47	269.05
Movements	(306.53)	(12.58)
Balance at end of the year	**(50.06)**	**256.47**

Exchange differences relating to the translation of the results and net assets of the Group's foreign subsidiaries from their functional currencies to the Group's presentation currency (i.e. Indian Rupees) are recognised directly in Other Comprehensive Income and accumulated in the foreign currency translation reserve. Exchange differences accumulated in the foreign currency translation reserve are reclassified to Profit or Loss at the time of disposal of respective foreign operation.

k. Revaluation surplus

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	23.74	23.74
Movements	-	-
Balance at end of the year	**23.74**	**23.74**

Land & Buildings of the Parent company added upto 31st August 1984 were revalued in 1984 based on the valuation done by an independent valuer. The value added on revaluation amounting to ₹58.41 million was credited to fixed asset revaluation reserve. The depreciation charged on the revalued portion was recouped every year from this reserve upto March 31, 2015 under previous GAAP.

l. Share application money pending allotment

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	0.23	-
Movements	(0.23)	0.23
Balance at end of the year	**-**	**0.23**

Share application money pending for allotment under ESOP scheme. This represents the amount to the extent not refundable.

Notes forming part of the Consolidated Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

15. Non-Controlling Interest [NCI]

Particulars	As at	
	31.03.2019	31.03.2018
Balance at beginning of the year	614.74	656.63
Share of Profit	(0.78)	39.92
Share of Other Comprehensive Income	1.35	(1.10)
Dividend paid to Non-Controlling Interest and its relevant tax thereon	(82.95)	(84.36)
Translation impact on Non-Controlling Interest of foreign subsidiaries	(9.26)	3.65
Balance as at the end of the year	**523.10**	**614.74**

Details of Non-Controlling Interests

The table below shows details relating to Non-Controlling Interest in the entities which are not wholly owned by the Group.

Name of the Subsidiary	Place of incorporation	Proportion of ownership	
		31.03.2019	31.03.2018
Southern Energy Development Corporation Ltd.	India	15.24%	15.24%
Sterling Abrasives Ltd.	India	40.00%	40.00%
CUMI (Australia) Pty Ltd.	Australia	48.78%	48.78%
Volzhsky Abrasives Works	Russia	2.56%	2.56%
Foskor Zirconia (Pty) Ltd.	South Africa	49.00%	49.00%

Name of the Subsidiary	Accumulated Non-Controlling Interest		Profit / (Loss) allocated to Non-Controlling Interest		Other Comprehensive Income allocated to Non-Controlling Interest	
	As at		For the year		For the year	
	31.03.2019	31.03.2018	2018-19	2017-18	2018-19	2017-18
Southern Energy Development Corporation Ltd.	19.55	26.93	2.95	7.72	(0.18)	0.01
Sterling Abrasives Ltd.	221.45	195.71	37.69	36.49	1.07	(1.27)
CUMI (Australia) Pty Ltd.	281.31	283.66	56.77	52.07	-	-
Volzhsky Abrasives Works	108.37	101.88	22.85	23.17	-	-
Foskor Zirconia (Pty) Ltd.	(107.58)	6.56	(121.04)	(79.53)	0.46	0.16
Total	**523.10**	**614.74**	**(0.78)**	**39.92**	**1.35**	**(1.10)**

Summarised financial information in respect of each of the Group's subsidiaries is set out below. The information below represents amounts before intragroup eliminations.

Particulars	Southern Energy Development Corporation Ltd.		Sterling Abrasives Ltd.		CUMI (Australia) Pty Ltd.	
	As at		As at		As at	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018	31.03.2019	31.03.2018
Non-Current assets *	95.34	125.27	368.75	376.38	122.47	120.69
Current assets	44.17	60.38	385.97	332.81	644.27	579.48
Non-Current liabilities	(2.43)	(0.28)	(26.65)	(24.03)	(5.80)	(7.28)
Current liabilities	(8.77)	(8.68)	(174.44)	(195.87)	(169.48)	(96.63)
Equity attributable to owners of the Company	**108.76**	**149.76**	**332.18**	**293.58**	**310.15**	**312.60**
Non-Controlling Interest	**19.55**	**26.93**	**221.45**	**195.71**	**281.31**	**283.66**

* Southern Energy Development Corporation Ltd.: Non current assets excludes fair valuation of the Parent company's shares held by it.

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Particulars	Southern Energy Development Corporation Ltd.		Sterling Abrasives Ltd.		CUMI (Australia) Pty Ltd.	
	For the year		For the year		For the year	
	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Revenue	195.59	246.43	916.34	816.39	1082.01	917.28
Expenses	(176.22)	(195.75)	(822.13)	(725.18)	(965.63)	(810.54)
Profit/(Loss) for the year	**19.37**	**50.68**	**94.21**	**91.21**	**116.38**	**106.74**
Profit/(Loss) attributable to owners of the Company	16.42	42.96	56.52	54.72	59.61	54.67
Profit/(Loss) attributable to the Non-Controlling Interest of the Company	2.95	7.72	37.69	36.49	56.77	52.07
Profit/(Loss) for the year	**19.37**	**50.68**	**94.21**	**91.21**	**116.38**	**106.74**
Other Comprehensive Income attributable to owners of the Company	(1.03)	0.02	1.60	(1.91)	-	-
Other Comprehensive Income attributable to Non-Controlling Interest of the Company	(0.18)	0.01	1.07	(1.27)	-	-
Other Comprehensive Income for the year	**(1.21)**	**0.03**	**2.67**	**(3.18)**	**-**	**-**
Total Comprehensive Income attributable to owners of the Company	15.39	42.98	58.12	52.81	59.61	54.67
Total Comprehensive Income attributable to Non-Controlling Interest of the Company	2.77	7.73	38.76	35.22	56.77	52.07
Total Comprehensive Income for the year	**18.16**	**50.71**	**96.88**	**88.03**	**116.38**	**106.74**
Dividend paid to Non-Controlling Interests (including relevant tax thereon)	**(10.14)**	**(16.03)**	**(13.02)**	**(10.83)**	**(51.20)**	**(48.55)**
Net cash inflow/(outflow) from Operating activities	47.01	82.58	98.90	104.49	60.94	60.77
Net cash inflow/(outflow) from Investing activities	17.50	22.77	(30.72)	(36.66)	(9.99)	(7.23)
Net cash inflow/(outflow) from Financing activities	(66.55)	(105.19)	(66.71)	(67.24)	(104.96)	(99.53)
Net cash inflow/(outflow)	**(2.04)**	**0.16**	**1.47**	**0.59**	**(54.01)**	**(45.99)**

Particulars	Volzhsky Abrasives Works		Foskor Zirconia (Pty) Ltd.	
	As at		As at	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
Non-Current assets	1471.90	1432.34	138.11	206.71
Current assets	3161.09	2967.62	497.03	505.90
Non-Current liabilities	(76.51)	(70.78)	(237.03)	(272.33)
Current liabilities	(330.07)	(355.79)	(617.66)	(426.89)
Equity attributable to owners of the Company	**4118.04**	**3871.51**	**(111.97)**	**6.83**
Non-Controlling Interest	**108.37**	**101.88**	**(107.58)**	**6.56**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	Volzhsky Abrasives Works for the year		Foskor Zirconia (Pty) Ltd. for the year	
	2018-19	2017-18	2018-19	2017-18
Revenue	6501.75	5941.28	1118.90	816.96
Expenses	(5610.41)	(5037.48)	(1365.93)	(979.27)
Profit/(Loss) for the year	**891.34**	**903.80**	**(247.03)**	**(162.31)**
Profit/(Loss) attributable to owners of the Company	868.49	880.63	(125.99)	(82.78)
Profit/(Loss) attributable to the Non-Controlling Interest of the Company	22.85	23.17	(121.04)	(79.53)
Profit/(Loss) for the year	**891.34**	**903.80**	**(247.03)**	**(162.31)**
Other Comprehensive Income attributable to owners of the Company	-	-	0.49	0.18
Other Comprehensive Income attributable to Non-Controlling Interest of the Company	-	-	0.46	0.16
Other Comprehensive Income for the year	**-**	**-**	**0.95**	**0.34**
Total Comprehensive Income attributable to owners of the Company	868.49	880.63	(125.50)	(82.60)
Total Comprehensive Income attributable to Non-Controlling Interest of the Company	22.85	23.17	(120.58)	(79.37)
Total Comprehensive Income for the year	**891.34**	**903.80**	**(246.08)**	**(161.97)**
Dividend paid to Non-Controlling Interests (including relevant tax thereon)	**(8.59)**	**(8.95)**	**-**	**-**
Net cash inflow/(outflow) from Operating activities	518.50	690.07	12.48	(49.48)
Net cash inflow/(outflow) from Investing activities	(325.34)	(259.30)	(0.73)	(17.37)
Net cash inflow/(outflow) from Financing activities	(334.91)	(349.01)	(29.60)	1.42
Net cash inflow/(outflow)	**(141.75)**	**81.76**	**(17.85)**	**(65.43)**

Notes forming part of the Consolidated Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

16. Borrowings - Non Current

Particulars	Maturity date	Repayment terms	Interest rate	As at	
				31.03.2019	31.03.2018
Secured - at Amortised Cost					
Finance lease obligations (consisting of multiple contracts with varied maturities) **(a)**	Ranging from 2017 to 2022	Monthly instalments		9.90	19.22
Term loan from Bank				-	0.50
Unsecured - at Amortised Cost					
Redeemable Preference Share obligations **(b)**	Year 2023	On or before maturity date	12.7%	89.75	92.31
				99.65	**112.03**
Less: Current maturities of: (Refer Note: 20)					
- Term loans				-	0.50
- Finance lease obligations				6.91	7.54
- Redeemable Preference Share obligations				41.99	37.67
Total Non - Current Borrowings				**50.75**	**66.32**

a. Secured by vehicles acquired under finance lease arrangement - Refer Note: 37.

b. Interest accrued on preference share capital added to loan amount

c. Disclosure related to "Changes in liabilities arising from financial activities" under Ind AS 7 Statement of Cash flows:

Net debts reconciliation:	Note	31.03.2019	31.03.2018
Cash and Cash equivalents	12A	959.37	1276.34
Other investments (liquid)	6C(ii)	961.25	570.49
Current borrowings	18	(867.80)	(1181.59)
Non-Current borrowings (including current maturities)	16	(99.65)	(112.03)
Net Cash/(Net debt)		**953.17**	**553.21**

Particulars	Other assets		Liabilities from Financing activities		Total
	Cash and Cash equivalents	Other investments (liquid)	Current borrowings	Non Current borrowings (including current maturities)	
Net Cash/(Net debt) as at 31st March 2017	1248.39	49.64	(1424.47)	(135.00)	(261.44)
Changes from Financing Cash flows	28.20	520.85	273.56	33.36	855.97
The effect of changes in foreign exchange rates	(0.25)	-	(30.68)	(10.39)	(41.32)
Net Cash/(Net debt) as at 31st March 2018	**1276.34**	**570.49**	**(1181.59)**	**(112.03)**	**553.21**
Changes from Financing Cash flows	(263.28)	390.76	335.84	0.21	463.53
The effect of changes in foreign exchange rates	(53.69)	-	(22.05)	12.17	(63.57)
Net Cash/(Net debt) as at 31st March 2019	**959.37**	**961.25**	**(867.80)**	**(99.65)**	**953.17**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

17. Provision

Particulars	As at	
	31.03.2019	31.03.2018
A. Non-Current		
Employee benefits	**96.05**	**91.69**
B. Current		
Employee benefits	**175.25**	**170.59**

The movement represents the provision created for the year arising out of the valuation after considering the actual settlements made during the year.

18. Borrowings - Current

Particulars	As at	
	31.03.2019	31.03.2018
Unsecured - at amortised cost		
Other borrowings	306.52	574.86
Cash credit (repayable on demand)	484.54	508.95
Secured - at amortised cost (a)		
Cash credit (repayable on demand)	76.74	97.78
	867.80	**1181.59**

(a) The funding facility availed by one of the domestic subsidiary is secured by its current assets.

19. Trade payables

Particulars	As at	
	31.03.2019	31.03.2018
Total outstanding dues to micro and small enterprises **(c)**	30.36	16.21
Total outstanding dues of creditors other than micro enterprises and small enterprises	2056.40	1959.46
	2086.76	**1975.67**

a. Trade payables are non-interest bearing and are normally settled within the agreed due dates, generally ranging from 30 to 60 days.

b. All the payables are settled within the credit period as per pre-agreed terms. The entities in the Group have financial risk management policies in place to ensure that the payments are made within agreed period.

c. Dues to Micro and Small Enterprises have been determined to the extent such parties, as applicable, have been identified on the basis of information collected by the Management. This has been relied upon by the auditors. There were no overdue amounts/interest payable to Micro and Small Enterprises as per Micro, Small and Medium Enterprises Development Act, 2006 as at the Balance Sheet date or any time during the year.

20. Other financial liabilities

Particulars	As at	
	31.03.2019	31.03.2018
Current		
Secured		
Current maturities of Long term loan (Refer Note: 16)	-	0.50
Current maturities of Finance lease obligations (Refer Note: 16)	6.91	7.54
Unsecured		
Current maturities of Redeemable Preference Share obligation (Refer Note: 16)	41.99	37.67
Unclaimed and Unpaid dividends	22.88	18.96
Remuneration payable to Directors	21.14	21.32
Deposits	49.27	45.54
Payable relating to Capital expenditure	75.99	63.77
Other payables	525.13	472.31
	743.31	**667.61**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

21. Other current liabilities

Particulars	As at	
	31.03.2019	31.03.2018
Contract liabilities **(a)**	88.25	
Advance from Customers **(a(i))**	-	92.81
Statutory liabilities	92.61	97.54
	180.86	**190.35**

(a) Details about Contract Liabilities:

(i) In respect of the amount shown under "Advance from Customers" have not been reclassified to "Contract liabilities" as the Group has adopted Ind AS 115 "Revenue from Contract with Customers" effective from April 1, 2018 by using the modified retrospective method.

(ii) The outstanding balances in Contract liabilities/Advance from Customers have decreased from last year mainly on account of decrease in receipt of advances during current year.

(iii) Revenue recognized in relation to Contract liabilities/Advance from Customers.

The following summary shows how much of the revenue recognized in the current year relates to carried forward contract liabilities/advance form customers and how much relates to performance obligations that were satisfied in the prior year.

Particulars	For the year 2018 - 19
Revenue recognized that was included in the Contract liabilities/Advance from Customer balance at the beginning of the period	92.81
Revenue recognized from performance obligations satisfied in previous periods	-

iv) In respect of the remaining performance obligations, the disclosure towards allocation of transaction price do not arise as the contract has an original expected duration of one year or less.

22. Revenue from operations

Particulars	For the year	
	2018-19	2017-18
a. Gross Sales/Income from Operations		
Sale of products (including Excise duty of ₹274.07 million for the year 2017-18) - Refer Note: 31 "Segmental Disclosure" for breakup of sales.	25530.71	23131.10
Sale of services	1025.40	447.55
	26556.11	**23578.65**
b. Other operating income		
Service income	45.78	94.12
Commission income	0.07	0.10
Scrap Sales	107.62	89.46
Miscellaneous income	179.46	189.35
	332.93	**373.03**
Total Revenue from operations (a + b)	**26889.04**	**23951.68**

i. Gross Sales/Income from operations reported above are exclusive of excise duty effective from July 01, 2017 due to implementation of Goods and Service Tax. The comparative figures excluding excise duty is summarised below:

Particulars	For the year	
	2018-19	2017-18
Gross Sales/Income from Operations (inclusive of excise duty)	26556.11	23578.65
Less: Excise duty on Sales	-	274.07
Gross Sales/Income from Operations (exclusive of excise duty)	**26556.11**	**23304.58**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

ii. Impact on account of adoption of Ind AS 115 "Revenue from contracts with customers"

The Group has adopted Ind AS 115 "Revenue from Contract with Customers" effective from April 1, 2018 by using the modified retrospective method. The Group has applied the revenue standard for all open contracts as at the date of initial application. The effect on adoption of Ind AS 115 is not material and hence no adjustments have been made to the opening balance of retained earnings.

For the periods ended upto March 31, 2018, the Group had applied Ind AS 18 under which the revenue attributable to freight was recognised as revenue at the time of transfer of risk and rewards to the customer. Under the new standard Ind AS 115, the performance obligation relating to the freight has been identified as a separate performance obligation and is recognised as revenue at a point in time when the obligation is met and included as a part of "sale of services".

Consequent to the adoption of Ind AS 115 "Revenue from contracts with customers", revenue from sale of services increased by ₹623.23 million with a corresponding reduction in sale of products.

As permitted under the transitional provision in Ind AS 115, the relevant disclosures for the comparative period is not disclosed.

No element of financing is deemed present as the sales are made with a credit term which is one year or less.

Reconciliation of Revenue recognised with Contract price:

Particulars	For the year 2018 - 19
Contract price	26837.20
Less: Discount - Variable Consideration	281.09
Gross sales/Income from operations	**26556.11**

23. Other Income

	Particulars	For the year	
		2018-19	2017-18
(a)	**Dividend Income**		
	Dividend Income from Long term Investments	6.78	5.39
	Dividend Income from Current Investments	36.03	9.21
		42.81	**14.60**
(b)	**Interest Income earned on financial assets that are not designated as at Fair Value Through Profit or Loss [FVTPL]**		
	Interest Income		
	from banks	7.05	31.19
	from others	41.19	4.35
		48.24	**35.54**
(c)	**Net gain/(loss) arising on financial assets mandatorily measured at FVTPL**		
	(Refer Note: 6C (i) & (ii) investment schedule)	**0.70**	**0.78**
(d)	**Other non-operating income**		
	Profit on sale of assets	10.53	9.70
	Profit on sale of Investments (net)	0.12	-
	Profit on exchange fluctuation (net)	45.72	51.16
	Provision for expenses no longer required written back	9.59	17.61
	Reversal of impairment losses on financial assets	33.20	30.94
	Rental income	0.94	1.52
	Miscellaneous income	81.13	67.32
		181.23	**178.25**
	Total Other Income (a + b + c + d)	**272.98**	**229.17**

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24. Changes in inventories of finished goods, stock-in-trade and work in progress

Particulars	For the year	
	2018-19	**2017-18**
Opening stock		
Work-in-progress	898.95	887.74
Stock-in-trade (includes in-transit)	696.69	666.75
Finished goods	530.26	815.08
(A)	**2125.90**	**2369.57**
Less: Closing stock		
Work-in-progress	987.63	898.95
Stock-in-trade (includes in-transit)	596.83	696.69
Finished goods	808.87	530.26
(B)	**2393.33**	**2125.90**
(Accretion)/Decretion to stock (A) - (B)	**(267.43)**	**243.67**

25. Employee benefit expense

Particulars	For the year	
	2018-19	**2017-18**
Salaries, wages and bonus	2642.38	2495.34
Contribution to provident and other funds	190.23	180.89
Voluntary retirement compensation	0.87	1.35
Share based payments to employees (ESOPs) - Refer Note: 36 of Standalone financial statements	15.85	14.76
Welfare expenses	423.86	416.80
	3273.19	**3109.14**

26. Finance costs

Particulars	For the year	
	2018-19	**2017-18**
Interest costs		
- on Fixed loans	24.81	23.04
- on Others	44.08	53.86
Other borrowing costs	15.94	9.22
	84.83	**86.12**

27. Depreciation and amortisation expense

Particulars	For the year	
	2018-19	**2017-18**
Depreciation of property, plant and equipment - Refer 4A	1047.73	1020.33
Amortisation of intangible assets - Refer 5B(i)	34.98	39.62
	1082.71	**1059.95**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

28. Other expenses

Particulars	For the year	
	2018-19	2017-18
Consumption of stores and spares **(a)**	930.36	816.18
Power and fuel **(b)**	3786.10	3274.69
Rent	105.39	90.60
Excise duty on stock differential **(c)**	-	(67.39)
Rates and taxes	118.07	103.25
Insurance	48.55	42.86
Repairs to: **(d)**		
- Buildings	137.66	92.98
- Machinery	902.24	834.62
- Others	14.80	7.68
Data Processing Charges	124.67	127.68
Technical Fee / Royalty	80.34	92.64
Directors' Sitting fees	2.05	1.94
Commission to Non-wholetime Directors	15.25	15.60
Auditors' remuneration (including other auditors)	13.88	14.41
Travel and Conveyance	232.10	232.89
Freight, delivery and shipping charges	891.46	776.65
Selling commission	84.81	90.33
Advertisement and publicity	54.49	62.23
Printing, stationery and communication	50.90	58.10
Professional fees	246.69	223.94
Impairment loss on financial assets	15.22	6.90
Less: Provision adjusted	(12.26)	-
	2.96	6.90
Allowance for doubtful receivables and advances	36.42	33.22
Services outsourced	1446.89	1302.85
Loss on sale of assets	8.04	10.63
Miscellaneous expenses	349.12	287.25
	9683.24	**8532.73**

(a) Includes consumption of packing materials amounting ₹453.41 million (Previous year: ₹399.27 million).

(b) Net of own power generation, which includes energy banked with Kerala State Electricity Board - ₹Nil (Previous year: ₹Nil).

(c) Represents the excise duty differential on finished stocks;

(d) Repairs includes consumption of stores and spares amounting to ₹310.70 million (Previous year: ₹280.83 million).

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29. Income tax expense

Particulars		For the year	
		2018-19	2017-18
A. Income tax expense recognised in Profit and loss:			
a. Current tax			
In respect of the current year		1233.06	1114.72
		1233.06	**1114.72**
b. Deferred tax			
In respect of the current year		(22.17)	(94.73)
Adjustment to deferred tax attributable to changes in tax rates and laws		0.91	0.28
		(21.26)	**(94.45)**
Total Income tax expense recognised during the year (net)		**1211.80**	**1020.27**
Income tax reconciliation:			
Profit before tax	A	**3687.80**	**3216.15**
Less: Share of Profit from Associate and Joint Ventures	B	199.32	146.60
Profit from operations before share of profit of equity accounted investees and income tax	C = (A-B)	**3488.48**	**3069.55**
Applied tax rate as per Parent jurisdiction	D	34.944%	34.608%
Income tax expense calculated at the tax rate of 34.944%, applicable to the Parent Company (for FY 2017-18: 34.608%)	E = (C x D)	1219.01	1062.31
Total Tax expenses charged in Profit and Loss for the year	F	1211.80	1020.27
Differential tax impact	G = (F-E)	**(7.21)**	**(42.04)**
Differential tax impact due to the following (tax benefit)/tax expenses			
Effect of Income that is exempt from taxation net of disallowances		(2.92)	(0.75)
Effect of expenses that are not deductible in determining taxable profit		86.11	74.37
Claim of weighted benefit relating to In-house Research & Development facilities		(18.71)	(16.33)
Effect of increase in applicable tax rate in India		0.91	0.28
Deferred tax benefit not recognised on the losses of Subsidiaries		105.83	58.94
Effect of tax rate differentials in respect of subsidiaries operating in other jurisdictions		(178.43)	(158.55)
Total	**G**	**(7.21)**	**(42.04)**

B. Income tax recognised in Other Comprehensive Income:

Particulars	For the year	
	2018-19	2017-18
Net gain on designated portion of hedging instruments in cash flow hedges	(0.89)	1.33
Total income tax recognised in Other Comprehensive Income	**(0.89)**	**1.33**
Bifurcation of the income tax recognised in Other Comprehensive Income into:		
Items that will not be reclassified to profit or loss	-	-
Items that will be reclassified to profit or loss	(0.89)	1.33

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

30. Earnings per share

Particulars	For the year	
	2018-19	2017-18
Basic earnings per share (₹)	13.10	11.42
Diluted earnings per share (₹)	13.07	11.39
The calculation of Basic and Diluted Earnings per share is based on the following data:		
Consolidated Net Profit for the year after taxes	2476.78	2155.96
Weighted average number of equity shares outstanding during the year		
- Basic	189,049,874	188,783,979
- Dilutive	189,477,299	189,356,441

The weighted average number of equity shares for the purpose of diluted earnings per share reconciles to the weighted average number of equity shares used in the calculation of basic earnings per share as given below:

Particulars	For the year	
	2018-19	2017-18
Weighted average number of equity shares used in the calculation of basic earnings per share	189,049,874	188,783,979
Shares deemed to be issued for no consideration in respect of:		
- Employee Stock Option Scheme/Plan	427,425	572,462
Weighted average number of equity shares used in the calculation of diluted earnings per share	189,477,299	189,356,441

31. Segment information

The Group provides solutions majorly for five industrial manufacturing needs by developing, manufacturing and marketing products using the properties of materials known as electrominerals.

The Business Group Management Committee headed by Managing Director (CODM) consists of Chief Financial Officer, Leaders of Strategic Business Units and Human resources reviews the performance of the Company and has identified three core reportable business segments organised using differences in products and services.

- Surface engineering (material removal, cutting, polishing) known as Abrasives. Abrasive segment comprise of Bonded, Coated, Processed cloth, Polymers, Power tools and Coolants.
- Technical ceramics and super refractory solutions to address wear protection, corrosion resistance, electrical resistance, heat protection and ballistic protection known as Ceramics.
- Electrominerals for surface engineering, refractories, energy and environment. It includes fused alumina, silicon carbide, zirconia, specialty minerals and captive power generation from hydel power plant.

Besides the above three core segments, the Group has a power generation entity to serve its power requirements of the core business segments. The Group also has an IT services company which provides IT infrastructure facility management services, software application development services, remote infrastructure management services and IT security management services.

The Business Group Management Committee monitors the operating results of its business segments for the purpose of making decisions about resource allocation and performance assessment using profit or loss and return on capital employed.

Notes forming part of the Consolidated Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	Abrasives		Ceramics		Electrominerals		Power		IT Services		Eliminations		Total	
	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Revenue														
External Sales - Gross	10862.35	10350.30	5812.71	4909.50	8726.85	7774.45	44.13	53.54	84.67	43.31	-	-	25530.71	23131.10
Sale of Services	362.51	-	204.31	117.55	117.60	-	-	-	340.98	330.00	-	-	1025.40	447.55
Inter segment sales	18.62	13.15	26.96	40.49	1340.99	1112.07	143.12	185.26	25.73	27.65	(1555.42)	(1378.62)	-	-
Gross Sales / Income from Operations	**11243.48**	**10363.45**	**6043.98**	**5067.54**	**10185.44**	**8886.52**	**187.25**	**238.80**	**451.38**	**400.96**	**(1555.42)**	**(1378.62)**	**26556.11**	**23578.65**
Results														
Segment result - EBITDA	1708.76	1631.14	1388.58	1043.09	1684.71	1672.82	57.13	105.26	48.78	49.18	-	-	4887.96	4501.49
Depreciation/amortisation	(306.02)	(309.76)	(307.94)	(281.32)	(401.79)	(401.40)	(41.50)	(41.10)	(14.19)	(12.74)	-	-	(1071.44)	(1046.32)
Profit on sale of Fixed Assets (Net)	(1.26)	3.30	0.98	(3.18)	(3.81)	(1.93)	(0.03)	0.02	-	(0.24)	-	-	(4.12)	(2.03)
Unallocated corporate expenses (Net)													(330.96)	(348.39)
Interest expense													(84.83)	(86.12)
Profit from Associate													61.45	52.32
Profit from Joint Ventures													137.87	94.28
Interest and dividend income													91.05	50.14
Fair valuation of Investment													0.70	0.78
Profit on investment (net)													0.12	-
Profit before tax	**1401.48**	**1324.68**	**1081.62**	**758.59**	**1279.11**	**1269.49**	**15.60**	**64.18**	**34.59**	**36.20**	**-**	**-**	**3687.80**	**3216.15**
Less: Income taxes													1211.80	1020.27
Net profit after taxes													**2476.00**	**2195.88**
Less: Non-controlling interest													(0.78)	39.92
Profit for the year attributable to Owners of the Company													**2476.78**	**2155.96**
Other information:														
Segment assets	6552.83	6390.24	4572.79	4381.81	7079.73	6531.31	50.46	92.84	157.34	164.61	-	-	18413.15	17560.81
Unallocated corporate assets*													3907.17	3424.40
Total assets	**6552.83**	**6390.24**	**4572.79**	**4381.81**	**7079.73**	**6531.31**	**50.46**	**92.84**	**157.34**	**164.61**	-	-	**22320.32**	**20985.21**
Segment liabilities	1371.18	1365.08	522.84	479.65	1017.83	899.33	10.96	8.72	112.17	98.84	-	-	3034.98	2851.62
Unallocated corporate liabilities													1521.22	1875.35
Total liabilities	**1371.18**	**1365.08**	**522.84**	**479.65**	**1017.83**	**899.33**	**10.96**	**8.72**	**112.17**	**98.84**	-	-	**4556.20**	**4726.97**
Addition to Non-current assets	322.72	347.54	237.30	228.89	373.07	322.06	2.38	0.42	21.26	12.06				
Depreciation & Amortization	306.02	309.76	307.94	281.32	401.79	401.40	41.50	41.10	14.19	12.74				
Non-cash items other than depreciation and amortisation	11.38	31.20	21.22	7.88	4.27	4.40	-	-	2.51	1.37				

* includes Goodwill of ₹1222.82 million (Previous year: ₹1151.41 million), Investment in Associate and Joint Ventures under equity method - ₹1200.81 million (Previous year: ₹1072.16 million)

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	Abrasives	Ceramics	Electrominerals	Power	IT Services	Eliminations	Total
	2018-19						
Revenue recognised under Ind AS 115							
- At the point in time	11243.48	5982.78	10185.44	187.25	84.68	(1529.69)	26153.94
- Over the period	-	61.20	-	-	366.70	(25.73)	402.17
Gross Sales / Income from Operations	**11243.48**	**6043.98**	**10185.44**	**187.25**	**451.38**	**(1555.42)**	**26556.11**

Sales between operating segments are carried out at arm's length basis and are eliminated at Group level consolidation.

The accounting policies of the reportable segments are same as that of Group's accounting policies described in Note: 3.22. Segment profit represents the profit before tax earned by each segment without allocation of central administration costs and directors' salaries, other income, as well as finance costs. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance.

Segment assets and liabilities

For the purposes of monitoring segment performance and allocating resources between segments:

1. All assets are allocated to reportable segments other than investments, loans, current and deferred tax assets, unallocable current and non-current assets.
2. All liabilities are allocated to reportable segments other than borrowings, current and deferred tax liabilities and unallocable current and non-current liabilities.

Geographical information

The Parent company is domiciled in India. The amount of its revenue from external customers are broken down by location of those customers and information about its non-current assets other than investment, other financial instruments and deferred tax assets are given below:

	Revenue from external customer		Non-current assets	
	For the year		As at	
	2018-19	2017-18	31.03.2019	31.03.2018
India	14533.87	13047.56	4910.57	5183.30
Rest of the world	12022.24	10531.09	2873.23	2786.86
	26556.11	**23578.65**	**7783.80**	**7970.16**

Information about major customers

No single customer contributed 10% or more to the Group's revenue during the years 2018-19 and 2017-18.

Gross Sales/Income from operations reported above are exclusive of excise duty effective from July 01, 2017 due to implementation of Goods and Service Tax. The comparative figures excluding excise duty is summarised below:

Particulars	Abrasives		Ceramics		Electrominerals		Power		IT Services		Eliminations		Total	
	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Gross Sales/Income from Operations (inclusive of excise duty)	11243.48	10363.45	6043.98	5067.54	10185.44	8886.52	187.25	238.80	451.38	400.96	(1555.42)	(1378.62)	26556.11	23578.65
Less: Excise duty on Sales	-	(179.17)	-	(42.70)	-	(52.20)	-	-	-	-	-	-	-	(274.07)
Gross Sales/Income from Operations (exclusive of excise duty)	11243.48	10184.28	6043.98	5024.84	10185.44	8834.32	187.25	238.80	451.38	400.96	(1555.42)	(1378.62)	26556.11	23304.58

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

32. Subsidiaries

Name of Subsidiary	Nature of Business	Place of incorporation and operation	Proportion of ownership interest and voting power held by the Group As at	
			31.03.2019	31.03.2018
Net Access India Ltd.	IT services	India	100%	100%
Southern Energy Development Corporation Ltd.	Power generation	India	84.76%	84.76%
Sterling Abrasives Ltd.	Manufacture/Trading of Abrasive products	India	60%	60%
CUMI (Australia) Pty Ltd.	Manufacture/Trading of Ceramic products & its related services	Australia	51.22%	51.22%
CUMI International Ltd.	Investment company	Cyprus	100%	100%
Holdings through Subsidiary:				
Volzhsky Abrasive Works	Manufacture of Abrasive, Electromineral and Ceramic products	Volgograd, Russia	97.44%	97.44%
Foskor Zirconia (Pty) Ltd.	Manufacture of Electromineral products	South Africa	51%	51%
CUMI America Inc.	Trading of Abrasive & Ceramic products	USA	100%	100%
CUMI Middle East FZE	Trading of Abrasive & Ceramic products	Ras Al Khaimah, UAE	100%	100%
CUMI Abrasives & Ceramics Company Ltd.	Manufacture / Trading of Abrasive & Ceramic products	China	100%	100%
Thukela Refractories Isithebe Pty Ltd.	Manufacture of Ceramic & Electromineral products	South Africa	100%	100%
CUMI Europe s.r.o	Trading of Electromineral products	Czech Republic	100%	100%

Composition of the Group

Principal activity	Place of incorporation and operation	Number of wholly-owned subsidiaries As at	
		31.03.2019	31.03.2018
Manufacture & Trading of Abrasive products	China, America, Middle East	3	3
Manufacture & Trading of Electromineral products	South Africa, Czech Republic	2	2
IT services provided	India	1	1
Investment company	Cyprus	1	1
		7	**7**

Principal activity	Place of incorporation and operation	Number of non wholly-owned subsidiaries	
		31.03.2019	31.03.2018
Manufacture & Trading of Abrasive products	India	1	1
Manufacture & Trading of Ceramic products	Australia	1	1
Manufacture & Trading of Electromineral products	South Africa, Russia	2	2
Power generation	India	1	1
		5	**5**

Details of the Non-Controlling Interest relating to non-wholly owned subsidiary to the Group are disclosed in Note: 15

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

33. Contingent Liabilities and Commitments in respect of which no provision is considered necessary

S.No	Particulars	As at	
		31.03.2019	31.03.2018
A.	**Contingent Liabilities:**		
(a)	Outstanding letters of credit	436.59	217.63
(b)	Disputed income tax, sales tax, excise duty, service tax and customs duty demands which are under various stages of appeal proceedings.	349.95	373.00
(c)	Claims against the companies in the Group not acknowledged as debts:		
	i. Disputed demands by Electricity Board	43.35	43.34
	ii. Contested Provident fund and ESI demands	0.11	0.11
	iii. Others	55.83	55.83
		99.29	**99.28**
(d)	Employees demands pending before Labour Courts - quantum not ascertainable at present		
	In respect of the above demands disputed by the companies in the Group, appeals filed are pending before respective appellate authorities. Outflows, if any, arising out of these claims would depend on the outcome of the decision of the appellate authorities and the respective Company's rights for future appeals. No reimbursements are expected.		
(e)	In respect of associate and joint ventures refer note 6A & 6B		
B.	**Commitments:**		
	Estimated amount of contracts remaining to be executed and not provided for:		
	- Towards capital account	**452.83**	**139.86**
	- In respect of associate and joint ventures refer note 6A & 6B		

34. Employee Benefits

A. Defined contribution plans:

The Group operates defined contribution retirement benefit plans under various jurisdictions for all qualifying employees. The assets of the plans are held separately from those of respective companies under the control of trustees/Government organisations. Where employees leave the plans prior to full vesting of the contributions, the contributions payable by the respective companies in the Group are reduced by the amount of forfeited contributions.

Particulars	For the year	
	2018-19	2017-18
Contribution to Provident fund and Other funds recognised in Profit and Loss	161.00	150.88
Amounts outstanding as at the end of the respective year and paid subsequently	30.21	17.14

Defined benefit plans:

The Group sponsors defined benefit plans for qualifying employees of the Parent company and its subsidiaries, wherever applicable. The defined benefit plans are administered by an independent Fund that is legally separated from the respective entities.

Under the plans applicable to the Parent Company and its domestic subsidiaries, the employees are entitled to post-retirement yearly instalments amounting to 57.69% of final salary for each year of service until the retirement age of 58.

These plans typically expose the Group to actuarial risks such as: Investment, Interest rate, longevity and salary escalation risk:

Investment risk: The present value of the defined benefit plan liability (denominated in Indian Rupee) is calculated using a discount rate which is determined by reference to market yields at the end of the reporting period on government bonds. Currently, the investments are made in accordance with the guidelines under the applicable statutes.

Interest risk: A decrease in the bond interest rate will increase the plan liability; however, this will be partially offset by an increase in the return on the plan's debt investments.

Longevity risk: The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.

Salary escalation risk: The present value of the defined benefit plan liability is calculated with reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

In respect of the subsidiary in United Arab Emirates, the end of service benefits is accounted on time basis in full for every employee in the service of that entity in accordance with the provisions of the applicable labour laws of that country. The effect of these plans are regarded as immaterial considering the monetary impact to the Group.

In respect of the subsidiary in South Africa, the defined benefit plans provided to the employees are post retirement health benefits and long service awards. The liability is ascertained using actuarial valuation and is accounted accordingly. The effect of these plans are regarded as immaterial considering the monetary impact to the Group.

The actuarial valuation of the plan assets and the present value of the defined benefit obligations of the Parent Company and its subsidiaries in India were carried out as at March 31, 2019 by certified actuaries. The present value of the defined benefit obligation, and the related current service cost and past service cost, were measured using the projected unit credit method.

No other post-retirement benefits are provided to the employees. In respect of the contribution made to provident funds, the Parent guarantees the interest notified by the appropriate authority and to the extent of interest rate guaranteed, the liability is considered as defined benefit. For the financial year ended March 31, 2019, the interest yield is adequate to meet the guaranteed interest.

Assumptions:

The principal assumptions used for the purposes of the actuarial valuations are given below:

Particulars	As at	
	31.03.2019	31.03.2018
Discount rate	7.41% to 7.79%	7.7% to 8%
Expected rate of return	7% to 8%	7.7% to 8%
Expected salary escalation	5%	5% to 7%
Mortality table used	Indian Assured Lives Mortality (2012-14) Ultimate	Indian Assured Lives Mortality (2006-08) Ultimate

Estimates of future salary increase takes into account: inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market.

The details of actuarial valuation in respect of Gratuity liability is given below:

Particulars	As at	
	31.03.2019	31.03.2018
i. Projected benefit obligation as at beginning of the year	315.85	300.55
Service cost	27.64	27.76
Interest cost	23.81	20.53
Remeasurement (gain)/loss:		
Actuarial (gain)/loss arising from experience adjustments	(9.09)	(5.26)
Benefits paid	(35.18)	(27.73)
Projected benefit obligation as at end of the year	**323.03**	**315.85**
ii. Fair value of plan assets as at beginning of the year	262.65	247.13
Expected return on plan assets	22.22	18.28
Contributions	28.17	26.64
Benefits paid	(35.18)	(27.73)
Remeasurement gain/(loss):		
Actuarial Gain/(losses) on plan assets	15.93	(1.67)
Fair value of plan assets as at end of the year	**293.79**	**262.65**
iii. Amount recognised in the Balance Sheet:		
Projected benefit obligation at the end of the year	323.03	315.85
Fair value of the plan assets at the end of the year	293.79	262.65
(Liability)/Asset recognised in the Balance Sheet-net	**(29.24)**	**(53.20)**
iv. Cost of the defined benefit plan for the year:		
Current service cost	27.64	27.76
Interest on obligation	23.81	20.53
Expected return on plan assets	(22.22)	(18.28)
Components of defined benefit cost recognised in the Statement of Profit and Loss	**29.23**	**30.01**
(included in Note: 25 Contribution to Provident and other funds)		
Remeasurement on the net defined benefit liability:		
Actuarial (gain)/loss arising from changes in demographic assumptions	(9.09)	(5.26)
Actuarial (gain)/loss arising from changes in financial assumptions	(15.93)	1.67
Components of defined benefit costs recognised in Other Comprehensive Income	**(25.02)**	**(3.59)**
Total cost of the defined benefit plan for the year	**4.21**	**26.42**

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V Experience Adjustment

Particulars	As at	
	31.03.2019	31.03.2018
Present value of defined benefit obligation	323.03	315.85
Fair value of plan assets	293.79	262.65
Balance Sheet (Liability)/Asset	(29.24)	(53.20)

Particulars	For the year	
	2018-19	2017-18
Profit and Loss	29.23	30.01
Experience adjustment on plan liabilities (gain) / loss	(9.09)	(5.26)
Experience adjustment on plan assets (gain) / loss	(15.93)	1.67

In the absence of the relevant information, the above details does not include the composition of plan assets and expected return on each category of plan assets.

The actual return on plan assets was ₹22.21 million (for the year ended March 31, 2018: ₹18.28 million).

Sensitivity analysis in respect of the actuarial assumptions used in calculation of defined benefit obligation is given below:

Particulars	As at	
	31.03.2019	31.03.2018
Discount rate - 100 basis point higher	(298.38)	(292.92)
Discount rate - 100 basis point lower	346.59	336.24
Salary escalation rate - 100 basis point higher	343.10	334.39
Salary escalation rate - 100 basis point lower	(300.92)	(294.15)
Life expectancy rate - 100 basis point higher	329.64	317.82
Life expectancy rate - 100 basis point lower	(310.81)	(308.12)

In the above table, positive figures indicate increase in the liability and negative figures indicate decrease in the liability.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

The weighted average duration of the benefit obligation as at March 31, 2019 is 15 years (as at March 31, 2018: 15 years).

The Group expects to make a contribution of ₹35.64 million (as at March 31, 2018: ₹54.95 million) to the defined benefit plans during the next financial year.

B. Provident fund

The actuary has assessed the calculations of the Interest Rate Guarantees based on the guidance note issued by the Institute of Actuaries of India. The disclosures required under Ind AS 19 is as set out below:

Fund and plan asset position are as follows:

Particulars	As at	
	31.03.2019	31.03.2018
Plan asset at the end of the year	1095.25	1027.54
Present value of benefit obligation at the end of the year	770.54	986.00
Surplus available	324.71	41.54
Asset recognised in the Balance Sheet	Not applicable since a separate Trust is maintained	

The plan assets are primarily invested in Government securities.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Assumptions for present value of interest rate guarantee are as follows:

Particulars	As at	
	31.03.2019	31.03.2018
Discount rate	7.79%	8.00%
Remaining term to maturity of portfolio (years)	6.21 years	4.76 years
Expected guaranteed rate(%)	8.65%	8.55%
Attrition rate	2%	2%

35. Financial Instruments

(i) Capital management

For the purpose of the Group's capital management, capital includes issued equity capital, share premium and all other equity reserves attributable to the equity holders of the parent. The primary objective of the Group's capital management is to maximise the shareholder value.

The Group's objective when managing capital is to:

- Safeguard their ability to continue as a going concern, so that they can continue to provide return for shareholders and benefits for other stakeholders and;
- Maintain an optimal capital structure to reduce the weighted average cost of capital.

In order to maintain or adjust the capital structure , the Group may adjust the amount of dividend paid to shareholders, return capital to shareholders, issue new shares, or sell non-core assets to reduce the debt.

Debt to Equity ratio

Particulars	As at	
	31.03.2019	31.03.2018
Debt (Long term borrowings, Short term borrowings & Current maturities of Long term borrowings)	967.45	1293.62
Equity	17241.02	15643.50
Debt to Equity ratio	5.61%	8.27%

Loan Covenants:
As on March 31, 2019, there are no covenants applicable for long term loan outstanding.

(ii) Categories of financial instruments

Particulars	As at	
	31.03.2019	31.03.2018
A. Financial assets		
Measured at fair value through profit or loss (FVTPL): Mandatorily measured:		
- Equity and other investments	966.04	574.63
Measured at amortised cost		
- Cash and bank balances	975.07	1289.10
- Other financial assets	5343.24	4926.02
Measured at fair value through Other Comprehensive Income (FVTOCI)		
- Investments in equity instruments designated upon initial recognition	98.34	156.15
B. Financial liabilities		
Measured at amortised cost (including trade payable balances)	3748.62	3891.19

(iii) Financial risk management objectives

The Group's activities expose it to market risk, liquidity risk and credit risk. The table given below explains the sources of risk which the Group is exposed to and how the Group manages the risk.

Risk	Exposure arising from	Measurement	Management
a. Credit risk	Cash and cash equivalents, trade receivables, derivative financial instruments, financial assets measured at amortised cost	Ageing analysis Credit ratings Financial analysis	Diversification of Short term investments, review of credit limits and credit locks and secured mode of payment
b. Market risk			
i. Market risk - foreign exchange	Future commercial transactions Recognised financial assets and liabilities not denominated in Indian rupee (INR)	Cash flow forecasting Sensitivity analysis	Forward foreign exchange contracts
ii. Market risk - interest rate	Long-term borrowings at variable rates	Sensitivity analysis	Market trends, Interest rate swaps
iii. Market risk - Price risk	Investment in securities	Sensitivity analysis	Portfolio diversification
c. Liquidity risk	Borrowings and other liabilities	Rolling cash flow forecasts	Availability of sanctioned credit lines and borrowing facilities

The risk management is governed by policies developed in accordance with the Group guidelines and approved by the Board of Directors of the respective companies in the Group. They identify, evaluate and hedge financial risks in close co-ordination with their operating units.

a. Credit risk:

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

a (i). Trade receivables

Customer credit risk is managed by respective companies under the guidance of the credit policy, procedures and control relating to customer credit risk management. Credit quality of a customer is assessed based on financial position, past performance, business/economic conditions, market reputation, expected business etc. Based on that credit limit & credit terms are decided. Outstanding customer receivables are regularly monitored through credit lock and release to effectively manage the exposure.

An impairment analysis is performed at each reporting date on an individual basis for all the customers. The impairment is based on expected credit model considering the historical data. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 11.

The Group has low concentration of risk with respect to trade receivables, as its customers are located in various geographies and belong to diversified industries and operate in largely independent markets.

a (ii). Financial instruments and cash deposits

Credit risk from balances with banks and financial institutions is managed by the respective companies in accordance with their policy. Group recommends investments of surplus funds in short-term liquid funds and deposits with banks. The Investment limits are set out and are reviewed by the Board of Directors of the respective company on an quarterly basis.

The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 6 & 12.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

b. Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risks: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk. Financial instruments affected by market risk include loans and borrowings, deposits, Investments (FVTOCI) and derivative financial instruments.

Market risk exposures are measured using sensitivity analysis. There has been no change to the Group's exposure to market risks or the manner in which these risks are being measured and managed.

b (i). Foreign currency risk management

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. Foreign exchange rate exposures are managed within policy parameters developed under guidelines of the Group and approved by Board of Directors of the respective companies. The Group recommends to its operating entities to perform, to the extent it is possible, their transactions in their functional currencies. Where this is not possible, the transactional currency risk may be hedged on an individual basis by currency forwards. The Group recommends hedging of around 50% of the net material exposure by currency. Exposures relating to capital expenditure beyond a threshold are hedged as per respective company's policy at the time of commitment.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities based on gross exposure at the end of the reporting period are as under:

Currency	Liabilities		Assets	
	As at		As at	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
US Dollar (USD)	265.13	252.67	1146.66	966.73
Euro (EUR)	46.23	207.62	489.96	646.01
Great British Pound (GBP)	-	0.07	5.62	3.51
Australian Dollar (AUD)	3.01	-	-	-
United Arab Emirates Dirham (AED)	0.57	-	7.26	-

Quantum of Forward contract (derivatives) (all of which identified as hedges) outstanding as at the end of the year (notional principal amount):

The details of outstanding forward exchange contracts taken towards hedging the trade exposures as on the reporting date are given as under:

Currency	Liabilities		Assets	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
USD	7.68	13.01	83.00	81.30

As at 31st March 2019, the outstanding forward exchange contracts were USD 1.20 million taken for receivable position and USD 0.1 million taken for payable position.

The value of the contracts outstanding currency wise is given below in the table:

Contracts booked for	Currency	As at 31.03.2019		As at 31.03.2018	
		Number of contracts	Value	Number of contracts	Value
Export receivable	USD	8	83.00	10	81.30
Import payment	USD	3	7.68	2	13.01

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Foreign currency sensitivity analysis

The Group is mainly exposed to US Dollar and Euro. The following table provides the sensitivity impact to a 10% strengthening or weakening of Indian rupee exchange rate against foreign currencies. The sensitivity analysis is done on net exposures. A positive number below indicates an increase in profit or equity when the Rupee weakens against the foreign currency and when net exposure is an asset.

Currency impact in (₹ million) relating to the foreign currencies of:	As at 31.03.2019		As at 31.03.2018	
	Profit or loss	Equity	Profit or loss	Equity
US Dollar (USD)	54.13	55.01	44.09	42.79
Euro (EUR)	29.79	29.79	29.93	29.93
Great British Pound (GBP)	0.38	0.38	0.24	0.24
Australian Dollar (AUD)	(0.20)	(0.20)	-	-
United Arab Emirates Dirham (AED)	0.45	0.45	-	-
Total	**84.55**	**85.43**	**74.26**	**72.96**

The Group sensitivity impact to foreign currency has marginally increased during the current year mainly due to the increase in the value of exposure of USD currency as at the end of the reporting period.

b (ii). Interest rate risk management

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group has been availing the borrowings on a fixed and variable rate of interest. These borrowings are carried at amortised cost. The borrowings on a fixed rate of interest basis are not subject to the interest rate risk as defined in Ind AS 107, since neither the carrying amount nor future cash flows will fluctuate because of change in market interest rates. The borrowings on a variable rate of interest are subject to interest rate risk as defined in Ind AS 107.

Classification of borrowings by nature of interest rate	As at	
	31.03.2019	31.03.2018
Borrowings at variable interest rate		
- Non - Current	-	-
- Current	867.80	1181.59
Borrowings at fixed interest rate		
- Non - Current	50.75	66.32
- Current	48.90	45.71
Total Borrowings	**967.45**	**1293.62**

Current borrowings at variable interest rate represents cash-credit and term loan. The foreign currency term loans are benchmarked to USD 6 months LIBOR.

Since there are no non-current borrowings on variable interest rate as on 31st March 2019 & 2018, interest rate exposure is nil.

b (iii). Price risks

The Group is exposed to equity price risks arising from equity investments. Certain of the Group equity investments are held for strategic rather than trading purposes. The Group also holds certain other equity investments for trading purposes.

Equity price sensitivity analysis

The accumulated fair value change recognised on equity investment which are held for strategic purpose and designated at Fair value through Other Comprehensive Income as at 31st March 2019 is ₹26.61 million (31st March 2018: ₹84.42 million) - Refer Note no: 14. The sensitivity analysis below have been determined based on the exposure to equity price risks at the end of the reporting periods. If equity prices moves-up or decrease by 5%, the impact to Other Comprehensive Income and equity is given below:

Movement of equity price	Impact to Other Comprehensive Income/equity	
	As at 31.03.2019	As at 31.03.2018
Increase by 5%	4.35	7.24
Decrease by 5%	(4.35)	(7.24)

The impact of change in equity price on non-current investment recorded at Fair value through Profit and Loss and other investment designated as Fair value through Other Comprehensive Income is not significant.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

c. Liquidity risk management

The Group has established a liquidity risk management framework. The Group manages liquidity risk through cash generation from business and by having adequate banking facilities. The Group continuously monitors forecasts and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

Contractual maturities of financial liabilities

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31st March 2019:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
Non-current financial liabilities						
Borrowings and interest thereon*	47.76		65.89			65.89
Finance lease liability	2.99		3.52			3.52
Current financial liabilities						
Borrowings and interest thereon*	867.80	911.19				911.19
Trade payables	2086.75	2086.75				2086.75
Finance lease liability	6.91	7.58				7.58
Maturities of long term borrowing	41.99	45.35				45.35
Other financial liabilities	694.41	694.41				694.41

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31st March 2018:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
Non-current financial liabilities						
Borrowings and interest thereon*	54.64		67.40			67.40
Finance lease liability	11.68		9.47	3.18		12.65
Current financial liabilities						
Borrowings and interest thereon*	1181.59	1240.66				1240.66
Trade payables	1975.67	1975.67				1975.67
Finance lease liability	7.54	10.83				10.83
Maturities of long term borrowing	38.17	41.22				41.22
Other financial liabilities	621.90	621.90				621.90

*Amount included in the above maturity analysis assumes interest outflows based on the actual interest rates.

Contractual maturities of financial assets

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31st March 2019:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
Non-current financial assets						
Other financial assets	133.39		64.94		68.45	133.39
Current financial assets						
Trade receivables	5139.22	5139.22				5139.22
Advance to employees	19.32	19.32				19.32
Other financial assets	51.31	51.31				51.31

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31st March 2018:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
Non-current financial assets						
Other financial assets	120.76		53.54		67.22	120.76
Current financial assets						
Trade receivables	4750.60	4750.60				4750.60
Advance to employees	12.78	12.78				12.78
Other financial assets	41.88	41.88				41.88

Maturity analysis of Derivative financial instruments

The following table details the Group maturity analysis for its derivative financial instruments. The table has been drawn up based on the undiscounted estimated cash flows determined by reference to the projected market rates at the end of the reporting period. A positive amount represents an anticipated cash inflow and a negative amount represents an anticipated cash outflow.

Currency	Contracts booked for	As at 31.03.2019			As at 31.03.2018		
		Carrying amount	Less than 1 year	1-3 years	Carrying amount	Less than 1 year	1-3 years
USD	Export receivable	83.00	83.00	-	81.30	81.30	-
USD	Import payment	7.68	7.68	-	13.01	13.01	-

The note below sets out details of additional undrawn facilities that the Group has at its disposal to further reduce liquidity risk.

Financing facilities

Particulars	As at 31.03.2019	As at 31.03.2018
Unsecured term loan from bank:		
Amount used	306.52	574.86
Amount unused	696.44	368.22
	1002.96	**943.08**
Unsecured cash credit and other borrowings facility:		
Amount used	484.54	508.95
Amount unused	910.58	934.53
	1395.12	**1443.48**
Secured Borrowings from bank:		
Amount used	-	0.50
Amount unused	-	0.00
	-	**0.50**
Secured cash credit and other borrowings facility:		
Amount used	76.74	97.78
Amount unused	1493.26	1472.22
	1570.00	**1570.00**
Total		
Amount used	867.80	1182.09
Amount unused	3100.28	2774.97
	3968.08	**3957.06**

Borrowing facilities - both funded and non-funded of the parent are secured by a pari-passu first charge on the current assets of the Company - both present and future; and a pari-passu second charge on immovable properties - both present and future.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Fair value measurements

This note provides information about how the Group determines fair value of various financial assets and financial liabilities.

Fair value of the Group financial assets and financial liabilities that are measured at fair value on a recurring basis.

Some of the Group financial assets and financial liabilities are measured at fair value at the end of the reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation techniques and inputs used):

Financial assets/financial liabilities	Fair Value as at		Fair value hierarchy	Valuation techniques & key inputs used
	31.03.2019	31.03.2018		
Investments in quoted equity instruments at FVTOCI	87.04	144.85	Level 1	Quoted bid price in an active market **(a)**
Investments in quoted instruments at FVTPL	965.76	574.30	Level 1	Quoted bid price in an active market
Investments in unquoted instruments at FVTPL	0.28	0.33	Level 3	Fair valuation **(b)**
Investments in unquoted instruments at OCI	11.30	11.30	Level 3	Fair valuation **(b)**

There were no changes in the fair value hierarchy levels in the above periods.

(a) These investments in equity instruments are not for trading. Instead, they are held for medium or long term strategic purpose. Upon the application of Ind AS 109, the Group has chosen to designate these investments in equity instruments as at FVTOCI as the Directors believe that this provides a more meaningful presentation for medium or long term strategic investments, than reflecting changes in fair value immediately in profit or loss.

(b) These investment in equity are not significant in value and hence additional disclosures are not presented.

Fair value of financial assets and financial liabilities that are not measured at fair value (but fair value disclosures are required)

Particulars	Fair value hierarchy	As at 31.03.2019		As at 31.03.2018	
		Carrying amount	Fair value	Carrying amount	Fair value
Financial assets at amortised cost:					
Non-current financial assets					
Other financial assets					
Security deposit	Level 3	133.39	127.36	120.76	115.78
Current financial assets					
Trade receivable	Level 2	5139.22	5139.22	4750.60	4750.60
Advances to employees	Level 3	19.32	19.32	12.78	12.78
Other advances	Level 3	51.31	51.31	41.88	41.88
Financial liabilities held at amortised cost:					
Non-current financial liabilities					
Borrowings and interest thereon	Level 2	47.76	47.76	54.64	54.64
Finance lease and interest thereon	Level 2	2.99	2.99	11.68	11.68
Current financial liabilities					
Borrowings and interest thereon	Level 2	867.80	867.80	1181.59	1181.59
Trade payables	Level 2	2086.75	2086.75	1975.67	1975.67
Finance lease and interest thereon	Level 2	6.91	6.91	7.54	7.54
Current maturities of long term	Level 2	41.99	41.99	38.17	38.17
Others financial liabilities	Level 3	694.41	694.41	621.90	621.90

The fair values of the financial assets and financial liabilities included above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant inputs being the discount rate that reflects the credit risk of counterparties.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Financial instrument by Category

Particulars	31.03.2019			31.03.2018		
	FVTPL	FVTOCI	Amortised Cost	FVTPL	FVTOCI	Amortised Cost
Financial Assets						
Non-Current						
Investments	4.79	98.34		4.14	156.15	
Other Financial Assets			133.39			120.76
Current						
Other Investment	961.25			570.49		
Trade receivables			5139.22			4750.60
Cash and Cash equivalent			959.37			1276.34
Bank balances other than above			15.70			12.76
Other financial assets			70.63			54.66
	966.04	**98.34**	**6318.31**	**574.63**	**156.15**	**6215.12**
Financial Liabilities						
Non-Current						
Borrowings			50.75			66.32
Current						
Trade payables			2086.76			1975.67
Others financial liabilities			743.31			667.61
	-	**-**	**2880.82**	**-**	**-**	**2709.60**

36. Related Party Disclosures

List of related parties

Related party relationships are as identified by the management and relied upon by the auditors.

Joint ventures

Murugappa Morgan Thermal Ceramics Ltd.	[MMTCL]
Ciria India Ltd.	[Ciria]
Associate and its subsidiaries	
Wendt (India) Ltd.	[Wendt]
Wendt Grinding Technologies Ltd., Thailand	[WGTL]
Wendt (Middle East) FZE	[WME]
Key Management Personnel	
Mr. K Srinivasan, Managing Director	
Other Related parties	
Ambadi Investments Ltd. (Shareholder with significant influence and promoter holding more than 10%)	[AIL]
Parry Enterprises India Ltd. (Subsidiary of AIL)	[PEIL]
Parry Agro Industries Ltd. (Subsidiary of AIL)	[PAL]
Carborundum Universal Employees Provident fund	[CUEPF]
Retiral funds of Joint Ventures, Associate and Other Related parties	

Notes forming part of the Consolidated Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

A. Transactions during FY 2018-19

Related Party	Income from Sales & Services	Dividend income	Purchase of goods	Expenditure on other services	Rental Expenses	Managerial remuneration	Purchases of Fixed asset	Contribution to Provident Fund
Joint Ventures								
MMTCL	19.91	28.62	7.30	-	-	-	1.20	-
Ciria	46.78	6.00	0.79	-	-	-	-	-
Total	**66.69**	**34.62**	**8.09**	**-**	**-**	**-**	**1.20**	**-**
Associate & its subsidiaries								
Wendt	28.36	23.92	23.03	-	1.62	-	7.86	-
WGTL	71.98	-	6.35	-	-	-	-	-
Total	**100.34**	**23.92**	**29.38**	**-**	**1.62**	**-**	**7.86**	**-**
Other related parties								
PEIL	-	-	-	24.79	-	-	-	-
CUEPF	-	-	-	-	-	-	-	**124.45**
Total	-	-	-	**24.79**	-	-	-	**124.45**
KMP	-	-	-	-	-	23.24	-	-
Grand Total	**167.03**	**58.54**	**37.47**	**24.79**	**1.62**	**23.24**	**9.06**	**124.45**

B. Transactions during FY 2017-18

Related Party	Income from Sales & Services	Dividend income	Purchase of goods	Expenditure on other services	Rental Expenses	Managerial remuneration	Purchases of Fixed asset	Contribution to Provident Fund
Joint Ventures								
MMTCL	25.54	71.54	8.22	-	-	-	0.14	-
Ciria	108.38	30.00	1.97	-	-	-	-	-
Total	**133.92**	**101.54**	**10.19**	**-**	**-**	**-**	**0.14**	**-**
Associate & its subsidiaries								
Wendt	28.61	19.93	20.36	0.91	1.73	-	2.28	-
WGTL	56.41	-	4.71	-	-	-	-	-
WME	2.05	-	-	-	-	-	-	-
Total	**87.07**	**19.93**	**25.07**	**0.91**	**1.73**	**-**	**2.28**	**-**
Other related parties								
PEIL	-	-	-	34.40	-	-	-	-
CUEPF	-	-	-	-	-	-	-	**116.80**
Total	-	-	-	**34.40**	-	-	-	**116.80**
KMP	-	-	-	-	-	22.46	-	-
Grand Total	**220.99**	**121.47**	**35.26**	**35.31**	**1.73**	**22.46**	**2.42**	**116.80**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

C. Outstandings

Related Party	As at 31.03.2019			As at 31.03.2018		
	Trade and other receivable	Deposit outstanding	Payables	Trade and other receivable	Deposit outstanding	Payables
Joint Ventures						
MMTCL	11.14	-	1.65	17.23	-	0.38
Ciria	11.60	-	-	32.12	-	0.22
Total	**22.74**	**-**	**1.65**	**49.35**	**-**	**0.60**
Associate & its subsidiaries						
Wendt	31.69	1.00	5.33	26.66	1.00	1.92
WGTL	7.08	-	-	9.21	-	1.17
WME	-	-	-	1.05	-	-
Total	**38.77**	**1.00**	**5.33**	**36.92**	**1.00**	**3.09**
Other related parties						
PEIL	-	-	3.12	-	-	1.61
CUEPF	-	-	10.75	-	-	9.88
Total	**-**	**-**	**13.87**	**-**	**-**	**11.49**
Grand Total	**61.51**	**1.00**	**20.85**	**86.27**	**1.00**	**15.18**

Transactions with related parties in the nature of sale of goods, rendering of services, purchase of goods, procurement of services are at arm's length price.

Compensation to Key Management Personnel

The remuneration to Key Management Personnel for the years is given below:

Particulars	As at	
	31.03.2019	31.03.2018
Short term benefits	20.02	19.39
Post employment benefits	3.17	3.04
Other benefits	0.05	0.03
	23.24	**22.46**

The Remuneration to Key Management Personnel is determined by the Nomination and Remuneration Committee having regard to the performance of individual and market trends.

37. Notes relating to Leases

Particulars	As at	
	31.03.2019	31.03.2018
a. Original cost of Leased Assets	23.29	37.40
Cost as per Fixed Assets Schedule - Refer Note: 4A	23.29	34.94
b. Net Carrying amount	5.34	13.55
c. Reconciliation between Total Minimum Lease payments and their Present value:		
Total Minimum Lease Payments	11.10	23.48
Less: Future Liability on Interest account	(1.20)	(4.26)
Present value of Lease payments - Refer Note: 16	9.90	19.22

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

d. Year wise Future Minimum lease rental payments:

Particulars	Total Minimum Lease Payments as on 31.03.2019	Present value of Lease payments as on 31.03.2019	Total Minimum Lease Payments as on 31.03.2018	Present value of Lease payments as on 31.03.2018
(i) Not later than one year	7.58	6.91	10.83	7.54
(ii) Later than one year and not later than three years	3.52	2.99	9.47	8.71
(iii) Later than three years and not later than five years	-	-	3.18	2.97
(iv) Later than five years	-	-	-	-
Total	**11.10**	**9.90**	**23.48**	**19.22**

e. The Group has taken certain premises under operating leases cancellable at mutual option. Hence no disclosure in this regard has been made.

f. The subsidiary in America has entered into non-cancellable operating leases upto five years to the value of the minimum lease rentals aggregating to ₹12.74 million.

38. Dividend Tax on the Interim Dividend has been paid after availing the credit amounting to ₹14.09 million (Previous year: ₹18.15 million) in respect of the tax paid on the dividends received from three domestic subsidiaries. Dividend tax payable on the proposed final dividend is eligible for set-off of dividend tax credit amounting to ₹19.32 million (Previous year - ₹13.22 million) in respect of dividend tax payable on dividends to be distributed by three domestic subsidiaries and an overseas subsidiary based on provision under sub section (1A) of Section 115O of the Income Tax Act.

39. Research and Development expenditure incurred during the year is given below:

a) Revenue Expenditure (disclosed under respective heads of expenditure)

Particulars	For the year	
	2018-19	2017-18
Direct Material, Supplies and Consumables	34.17	36.64
Employee Benefit Expenses	60.69	55.80
Repair & Maintenance	5.08	3.04
Other Expenses	26.10	24.35
Depreciation	17.61	11.93
Total Revenue Expenditure	**143.65**	**131.76**

b) Capital Expenditure

Particulars	For the year	
	2018-19	2017-18
Property, plant and equipment		
Buildings	0.66	2.30
Plant & Machinery	34.26	24.21
Furniture & Fixtures	3.36	0.03
	38.28	**26.54**
Intangibles	-	0.02
Total	**38.28**	**26.56**
Capital Work-in-Progress	17.47	-
Total Capital Expenditure (including CWIP)	**55.75**	**26.56**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

40. Additional information as required by Paragraph 2 of the General Instructions for Preparation of Consolidated Financial Statements to Schedule III to the Companies Act, 2013

Name of the entity	2018-19							
	Net assets i.e. total asset minus total liabilities		Share in profit or loss		Share in Other Comprehensive Income		Share in Total Comprehensive Income	
	As % of Consolidated net assets	Amount (₹ million)	As % of Consolidated Profit	Amount (₹ million)	As % of Consolidated Other Comprehensive Income	Amount (₹ million)	As % of Consolidated Profit	Amount (₹ million)
I. Parent								
Carborundum Universal Limited	74.06%	12768.78	67.06%	1660.89	9.61%	(33.04)	76.32%	1627.85
II. Subsidiaries (including Step down subsidiaries)								
a) Indian								
1. Net Access India Ltd.	0.68%	116.89	1.08%	26.72	0.00%	(0.01)	1.25%	26.71
2. Southern Energy Development Corporation Ltd.	0.74%	128.31	0.78%	19.37	0.35%	(1.21)	0.85%	18.16
3. Sterling Abrasives Ltd.	3.21%	553.63	3.80%	94.21	(0.78%)	2.67	4.54%	96.88
b) Foreign								
1. CUMI (Australia) Pty Ltd.	3.43%	591.46	4.70%	116.38	-	-	5.46%	116.38
2. CUMI International Ltd.	20.99%	3619.03	12.65%	313.33	-	-	14.69%	313.33
3. Volzhsky Abrasives Works	24.51%	4226.41	35.99%	891.34	-	-	41.79%	891.34
4. Foskor Zirconia (Pty) Ltd.	(1.27%)	(219.56)	(9.97%)	(247.03)	(0.28%)	0.95	(11.54%)	(246.08)
5. CUMI America Inc.	0.13%	24.40	(0.98%)	(24.22)	-	-	(1.14%)	(24.22)
6. CUMI Middle East FZE	0.09%	16.30	0.00%	0.14	-	-	0.01%	0.14
7. CUMI Abrasives & Ceramics Company Ltd.	0.18%	31.42	(0.70%)	(17.28)	-	-	(0.81%)	(17.28)
8. Thukela Refractories Isithebe Pty Ltd.	-	-	-	-	-	-	-	-
9. CUMI Europe s.r.o	0.01%	2.41	(0.02%)	(0.50)	-	-	(0.02%)	(0.50)
Non-controlling interest in all subsidiaries	(3.03%)	(523.10)	0.03%	0.78	0.39%	(1.35)	(0.03%)	(0.57)
II. Associates (Investment as per equity method)								
1. Wendt (India) Ltd.	3.01%	519.31	2.48%	61.45	(0.31%)	1.10	2.93%	62.55
III. Joint ventures (Investment as per equity method)								
Indian								
1. Murugappa Morgan Thermal Ceramics Ltd.	3.40%	585.83	4.24%	105.03	0.46%	(1.59)	4.85%	103.44
2. Ciria India Ltd.	0.54%	95.67	1.33%	32.84	0.10%	(0.32)	1.52%	32.52
Inter-company Elimination & Consolidation Adjustments	(30.68%)	(5296.17)	(22.47%)	(556.67)	90.46%	(311.10)	(40.67%)	(867.77)
Total	**100.00%**	**17241.02**	**100.00%**	**2476.78**	**100.00%**	**(343.90)**	**100.00%**	**2132.88**

Notes forming part of the Consolidated Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Name of the entity	2017-18							
	Net assets i.e. total asset minus total liabilities		Share in profit or loss		Share in Other Comprehensive Income		Share in Total Comprehensive Income	
	As % of Consolidated net assets	Amount (₹ million)	As % of Consolidated Profit	Amount (₹ million)	As % of consolidated Other Comprehensive Income	Amount (₹ million)	As % of Consolidated Profit	Amount (₹ million)
I. Parent								
Carborundum Universal Limited	74.77%	11696.70	66.55%	1434.79	162.15%	29.95	67.36%	1464.74
II. Subsidiaries (including Step down subsidiaries)								
a) Indian								
1. Net Access India Ltd.	0.69%	108.26	1.26%	27.27	2.49%	0.46	1.28%	27.73
2. Southern Energy Development Corporation Ltd.	1.13%	176.69	2.35%	50.68	0.16%	0.03	2.33%	50.71
3. Sterling Abrasives Ltd.	3.13%	489.29	4.23%	91.21	(17.22%)	(3.18)	4.05%	88.03
b) Foreign								
1. CUMI (Australia) Pty Ltd.	3.81%	596.26	4.95%	106.74	-	-	4.91%	106.74
2. CUMI International Ltd.	19.89%	3111.36	13.16%	283.83	-	-	13.05%	283.83
3. Volzhsky Abrasives Works	25.40%	3973.39	41.92%	903.80	-	-	41.56%	903.80
4. Foskor Zirconia (Pty) Ltd.	0.09%	13.39	(7.53%)	(162.31)	1.84%	0.34	(7.45%)	(161.97)
5. CUMI America Inc.	0.28%	45.48	(1.52%)	(32.68)	-	-	(1.50%)	(32.68)
6. CUMI Middle East FZE	0.14%	21.69	0.36%	7.95	-	-	0.37%	7.95
7. CUMI Abrasives & Ceramics Company Ltd.	0.31%	48.82	(0.41%)	(8.88)	-	-	(0.41%)	(8.88)
8. Thukela Refractories Isithebe Pty Ltd.	-	-	(0.01%)	(0.11)	-	-	(0.01%)	(0.11)
9. CUMI Europe s.r.o	0.02%	3.04	(0.35%)	(7.59)	-	-	(0.35%)	(7.59)
Non-controlling interest in all subsidiaries	(3.93%)	(614.74)	(1.85%)	(39.92)	5.97%	1.10	(1.79%)	(38.82)
II. Associates (Investment as per equity method)								
1. Wendt (India) Ltd.	3.10%	484.89	2.43%	52.32	47.60%	8.79	2.81%	61.11
III. Joint ventures (Investment as per equity method)								
Indian								
1. Murugappa Morgan Thermal Ceramics Ltd.	3.30%	516.89	3.32%	71.52	4.60%	0.85	3.33%	72.37
2. Ciria India Ltd.	0.44%	70.38	1.06%	22.76	0.28%	0.05	1.05%	22.81
Inter-company Elimination & Consolidation Adjustments	(32.57%)	(5098.29)	(29.92%)	(645.42)	(107.87%)	(19.92)	(30.59%)	(665.34)
Total	**100.00%**	**15643.50**	**100.00%**	**2155.96**	**100.00%**	**18.47**	**100.00%**	**2174.43**

41. Events after the reporting period

No significant event is to be reported between the closing date and that of the meeting of Board of Directors.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

42. Applicability of New/amendment on existing Indian Accounting Standards (Ind AS)

New standard and amendments to existing standard has been published and is mandatory for the Company' accounting periods beginning after April 1, 2019 or later periods but have not been early adopted by the Company.

(a) New standards issued

Title of the new Ind AS	Ind AS 116: Leases
The nature of the impending change or changes in accounting policy	Ind AS 116 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. Currently, operating lease expenses are charged to the statement of profit and loss. The Standard also contains enhanced disclosure requirements for lessees. In respect of the accounting requirements from the point of view of the lessor, Ind AS 116 substantially conforms to Ind AS 17.
The date by which application of Ind AS is required	Effective from April 1, 2019
The date as at which it plans to apply Ind AS initially	This will be implemented from the effective date of April 1, 2019, as applicable
Impact to the Group	No Material impact foreseen. Appropriate disclosures would be complied with.

(b) Amendments to existing Ind AS

Amendment to existing Ind AS that are not yet effective are not expected to have a material impact on the Group in the future reporting periods.

Title of amendment to existing Ind AS	The nature of the impending change or changes in accounting policy
Appendix C, 'Uncertainty over Income Tax Treatments', to Ind AS 12, 'Income Taxes'	This appendix explains how to recognise and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment.
Long-term Interests in Associates and Joint Ventures - Amendments to Ind AS 28, 'Investment in Associates and Joint Venture'	Amendments to Ind AS 28 clarify that the long-term interests in an associate or joint venture to which the equity method is not applied should be accounted for using Ind AS 109.
Prepayment Features with Negative Compensation - Amendments to Ind AS 109, 'Financial Instruments'	Amendments to Ind AS 109 enable companies to measure at amortised cost some prepayable financial assets with negative compensation.
Plan Amendment, Curtailment or Settlement - Amendments to Ind AS 19, 'Employee Benefits'	The net defined benefit liability is remeasured to determine past service cost, or the gain or loss on curtailment or settlement, current service cost and net interest for the remainder of the period are remeasured using the same assumptions and the same fair value of plan assets.
Ind AS 103, 'Business Combination'	The amendments clarify that obtaining control of a business that is a joint operation, is a business combination achieved in stages. The acquirer should remeasure its previously held interest in the joint operation at fair value at the acquisition date.
Ind AS 111, 'Joint Arrangements'	The amendments clarify that a party that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business as defined in Ind AS 103. In such cases, previously held interests in the joint operation are not remeasured.
Ind AS 12, 'Income Taxes'	The amendments clarify that the income tax consequences of dividends on financial instruments classified as equity should be recognised according to where the past transactions or events that generated distributable profits were recognised.
Ind AS 23, 'Borrowing Cost'	Paragraph 14 of Ind AS 23 required an entity to exclude borrowings made specifically for the purpose of obtaining a qualifying asset. The amendments clarify that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use or sale, it becomes part of general borrowings.

43. Rounding off

All amounts disclosed in the financial statements and notes have been rounded off to the nearest millions as per the requirement of Schedule III, unles otherwise stated.

44. Approval of financial statements

The financial statements were reviewed and recommended by the Audit Committee and has been approved by the Board of Directors at their meeting held on April 26, 2019.

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(in Indian Rupees million, unless otherwise stated)

Statement containing salient features of the Financial Statement of Subsidiaries/Associate companies/Joint ventures.

Pursuant to first proviso to sub-section (3) of section 129 read with Companies (Accounts) Rules, 2014)

(a) Summary financial information of Subsidiary Companies

Reporting currency	RUB		RAND		AUD		INR		USD	
Exchange rate	1.01	1.01	4.78	4.78	49.09	49.09	NA	NA	69.79	69.79
Particulars	Volzhsky Abrasive Works		Foskor Zirconia Pty Ltd		CUMI Australia Pty. Ltd		Sterling Abrasives Limited		CUMI International Ltd	
Financial year	2018	2017	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018	2017
Date of becoming subsidiary	7th September 2007		4th August 2008		1st September 2003		31st March 2003		7th July 2007	
1. Share capital	3.64	3.64	0.00	0.00	24.58	24.58	9.00	9.00	1796.21	1796.21
2. Reserves & Surplus	3887.28	3329.50	(219.70)	11.71	454.81	454.81	544.63	480.29	1859.16	1548.73
3. Total Liabilities[a]	427.75	359.28	855.24	611.52	287.35	206.80	201.08	219.90	308.38	622.69
4. Total Assets[b]	4318.67	3692.42	635.54	623.23	766.74	686.19	754.71	709.19	3963.75	3967.63
5. Investments	0.10	0.13	-	-	-	-	-	-	3951.98	3951.98
6. Turnover	5998.91	5412.84	1052.22	791.31	1041.89	902.03	916.34	816.39	351.80	385.96
7. Profit before Tax	1131.48	985.70	(199.72)	(157.21)	159.77	149.89	133.51	134.28	327.66	279.66
8. Provision for Taxation	252.56	245.37	32.59	-	47.70	44.93	39.30	43.07	17.24	19.04
9. Profit after Tax	878.92	740.33	(232.31)	(157.21)	112.07	104.96	94.21	91.21	310.42	260.62
10. Proposed dividend[c]	364.19	338.40	-	-	112.07	104.96	32.55	32.53	-	-
11. % of Shareholding	98.07	98.07	51.00	51.00	51.22	51.22	60.00	60.00	100.00	100.00

Reporting currency	RMB		RAND		INR		INR		USD	
Exchange Rate	10.15	10.15	4.78	4.78	NA	NA	NA	NA	69.17	69.17
Particulars	CUMI Abrasives & Ceramics Co Ltd		Thukela Refractories Isithebe Pty. Ltd.		Southern Energy Development Corporation Limited		Net Access India Limited		CUMI Middle East FZE.	
Financial year	2018	2017	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Date of becoming subsidiary	31st December 2009		1st August 2012		31st March 2003		1st December 2001		11th December 2005	
1. Share capital	1021.59	1021.59	0.01	0.01	4.60	4.60	50.00	50.00	1.88	1.88
2. Reserves & Surplus	(988.26)	(971.56)	(0.01)	(0.01)	1110.26	1004.47	66.89	58.26	14.41	21.20
3. Total Liabilities[a]	103.97	116.93	-	-	11.20	8.96	113.82	100.25	71.58	93.64
4. Total Assets[b]	137.30	166.96	-	-	1126.06	1018.03	230.71	208.51	87.87	116.72
5. Investments	-	-	-	-	1020.26	876.56	10.39	0.00	-	-
6. Turnover	205.94	217.64	-	-	195.59	246.43	454.02	403.59	118.76	229.23
7. Profit before Tax	(16.69)	(29.01)	-	-	23.75	71.19	34.87	37.18	0.14	8.53
8. Provision for Taxation	-	-	-	-	4.38	20.51	8.15	9.91	-	-
9. Profit after Tax	(16.69)	(29.01)	-	-	19.37	50.68	26.72	27.27	0.14	8.53
10. Proposed dividend[c]	-	-	-	-	85.40	88.58	29.85	24.07	-	6.92
11. % of Shareholding	100.00	100.00	100.00	100.00	84.76	84.76	100.00	100.00	100.00	100.00

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(in Indian Rupees million, unless otherwise stated)

Reporting currency	USD		CZK	
Exchange Rate	69.17	69.17	3.12	3.12
Particulars	CUMI America Inc		CUMI Europe s.r.o	
Financial year	2018-19	2017-18	2018	2017
Date of becoming subsidiary	4th June 1999		9th December 2014	
1. Share capital	335.47	335.47	86.11	86.11
2. Reserves & Surplus	(311.08)	(287.11)	(23.28)	(22.56)
3. Total Liabilities(a)	442.05	425.12	0.33	7.59
4. Total Assets(b)	466.44	473.48	63.16	71.14
5. Investments	-	-	-	-
6. Turnover	626.44	504.38	-	31.83
7. Profit before Tax	(23.97)	(35.07)	(0.72)	(8.57)
8. Provision for Taxation	-	-	-	-
9. Profit after Tax	(23.97)	(35.07)	(0.72)	(8.57)
10. Proposed dividend(c)	-	-	-	-
11. % of Shareholding	100.00	100.00	100.00	100.00

1. Names of subsidiaries which are yet to commence operations - Nil
2. Names of subsidiaries which have been liquidated or sold during the year - Nil

Notes:

a. Total Liabilities include: Current Liabilities, Non Current Liabilities

b. Total Assets include: Current Assets, Non Current Assets

c. Including interim dividend and dividend distribution tax as applicable. For Volzhsky Abrasive Works, Russia, dividend for 2018 is due for consideration by the shareholders in June 2019.

d. The above information has been furnished in accordance with Section 129(3) of the Companies Act 2013. The above statement is based on the financial statements of the respective subsidiary company which have been prepared in accordance with regulatory requirements as applicable in the country of incorporation. In case of foreign subsidiaries, the figures given in foreign currency have been translated into Indian Rupees based on the exchange rate as on 31.03.2019 / 31.12.2018, as applicable.

e. The conversation rates have been maintained at the same for the previous financial year for comparative purposes.

f. Investments in VAW, Foskor, CACCL China, Thukela Refractories, CUMI Middle East, CUMI America, CUMI Europe are held by CUMI International Limited.

(b) Associates and Joint Ventures

Statement pursuant to Section 129(3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

S.no	Name of Associates/Joint Ventures	Wendt (India) Limited	Ciria India Limited	Murugappa Morgan Thermal Ceramics Limited
1	Latest audited Balance Sheet Date	31.03.2019	31.03.2019	31.03.2019
2	Date on which the Associate or Joint Venture was associated or acquired	16th October 1990	26th July 2000	13th November 1995
3	Shares of Associate/Joint Ventures held by the company on the year end			
	No. of shares	797,352	59,998	1,430,793
	Amount of Investment in Associates/Joint Venture ₹ In million	10.36	1.68	44.04
	Extent of Holding %	39.87	30.00	49.00
4	Description of how there is significant influence	Through shareholding	Through shareholding	Through shareholding
5	Reason why the associate / joint venture is not consolidated	Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials	Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials	Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials
6	Networth attributable to Shareholding as per latest audited Balance Sheet	519.31	95.67	585.83
7	Profit / Loss for the year	154.13	109.48	214.33
	Considered in Consolidation	61.45	32.84	105.03
	Not Considered in Consolidation	92.68	76.64	109.30

On behalf of the Board

M M Murugappan
Chairman

K Srinivasan
Managing Director

Chennai
April 26, 2019

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Independent Auditors' Report

To

The Members of Carborundum Universal Limited
Report on the audit of the Standalone Indian Accounting Standards (Ind AS) Financial Statements

Opinion

1. We have audited the accompanying standalone Ind AS financial statements of Carborundum Universal Limited ("the Company"), which comprise the Balance Sheet as at March 31, 2019, and the Statement of Profit and Loss (including Other Comprehensive Income), statement of changes in equity, statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

2. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone Ind AS financial statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2019, and total comprehensive income (comprising of profit and other comprehensive income), changes in equity and its cash flows for the year then ended.

Basis for Opinion

3. We conducted our audit in accordance with the Standards on Auditing (SAs) specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

4. Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the key audit matter
Appropriateness of revenue recognition on sale of goods and services Refer note 3.4 and Note 20 (a) of the standalone Ind AS financial statements. During the year, the Company has recognised ₹17,519.12 million as revenue from sale of goods and services which constitutes 97% of its total income. Revenue from sale of goods is recognised under Ind AS 115 - 'Revenue from Contracts with Customers' at a point in time when the control has been transferred, which generally coincides with dispatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales. Revenue from services is recognised over a period of time/at a point in time, as per the terms agreed with the customers. We determined this to be a key audit matter due to significant time and effort involved in assessing the appropriateness of revenue recognition including accounting for the discounts and covering the aspects of completeness, accuracy, occurrence and cut off.	Our audit procedures relating to revenue recognition include the following: a. Understood and performed procedures to assess the design and test the operating effectiveness of relevant controls related to recording of revenue including the related discounts. b. Assessed whether the policy of recognising revenue was in line with Ind AS - 115. c. Tested the reconciliation of the amounts as per the sales register to the general ledger. d. Performed tests, on sample basis by validating the amounts recorded with the underlying documents which inter - alia includes invoices, dispatch documents, customer orders/contracts, receipt of consideration from customers, where applicable and allocation of variable consideration namely discounts. e. Performed tests, on sample basis on revenue recognised from services, and ensured that the revenue was recognised over a period of time/at a point in time, as per the terms contracted with customers. f. Performed cut off testing, on sample basis and ensured that the revenue from sale of goods is recognised in the appropriate period. Based on the above procedures performed, we did not identify any exceptions in revenue recognition on sale of goods and services.

Key audit matter	How our audit addressed the key audit matter
Carrying value of equity investments in subsidiaries, joint ventures and associate Refer Note 3.20 and Notes 6A, 6B and 6C - of the standalone Ind AS financial statements. The Company's equity investments in subsidiaries, joint ventures and associate amounted to ₹2,408.43 million as at March 31, 2019. Such investments are carried at cost as per Ind AS 27 - Separate Financial Statements. The carrying value of investments in subsidiaries, joint ventures and associate was considered to be a key audit matter as these are material and significant to the net worth of the Company and is dependent on the future performance of the subsidiaries, joint ventures and associate.	Our audit procedures in relation to assessment of carrying value of investments in subsidiaries, joint ventures and associate, included the following: a. Understood and performed procedures to assess the design and test the operating effectiveness of relevant controls related to valuation of investments. b. We obtained the audited financial statements of the subsidiaries, joint ventures and associate and evaluated the assessment carried out by the Company with regard to net worth of those respective subsidiaries, joint ventures and associate with the carrying value of the investments made in those entities. c. We also obtained the Management's documentation and tested its assessment on whether there were indicators for impairment if any, of the aforesaid investments, as required by Ind AS 36, Impairment of Assets. Based on above procedures performed, we found the management's assessment of carrying value of investments in subsidiaries, joint ventures and associate to be reasonable.

Other Information

5. The Company's Board of Directors is responsible for the other information which comprises the information included in the Directors' Report including Annexures and Corporate Governance Report, but does not include the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

   In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

   We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the financial statements

6. The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these standalone Ind AS financial statements that give a true and fair view of the financial position, financial performance, changes in equity and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Ind AS notified under Section 133 of the Act [Companies (Indian Accounting Standards) Rules, 2015] and other relevant provisions of the Act. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

7. In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. Those Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

8. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

9. As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under Section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

10. We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
11. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.
12. From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other Legal and Regulatory Requirements

13. As required by the Companies (Auditor's Report) Order, 2016 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the Annexure B a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.
14. As required by Section 143(3) of the Act, we report that:
    a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
    b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.
    c) The Balance Sheet, the Statement of Profit and Loss (including other comprehensive income), the Statement of Changes in Equity and Cash Flow Statement dealt with by this Report are in agreement with the books of account.
    d) In our opinion, the aforesaid standalone Ind AS financial statements comply with the Ind AS notified under Section 133 of the Act [Companies (Indian Accounting Standards) Rules, 2015] and other relevant provisions of the Act.
    e) On the basis of the written representations received from the directors as on March 31, 2019 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2019 from being appointed as a director in terms of Section 164 (2) of the Act.
    f) With respect to the adequacy of the internal financial controls with reference to financial statements of the Company and the operating effectiveness of such controls, refer to our separate Report in "Annexure A".
    g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:
        i) The Company has disclosed the impact of pending litigations on its financial position in its financial statements - Refer Note 30 to the financial statements;
        ii) The Company did not have any material foreseeable losses on long-term contracts and there were no losses on derivative contracts as at March 31, 2019;
        iii) There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company;
        iv) The reporting on disclosures relating to Specified Bank Notes is not applicable to the Company for the year ended March 31, 2019.

For Price Waterhouse Chartered Accountants LLP
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership No. 100332

Place: Chennai
Date: April 26, 2019

Independent Auditors' Report

Annexure A to Independent Auditors' Report

Referred to in paragraph 14 (f) of the Independent Auditors' Report of even date to the members of Carborundum Universal Limited on the standalone Ind AS financial statements for the year ended March 31, 2019

Report on the Internal Financial Controls with reference to financial statements under Clause (i) of Sub-section 3 of Section 143 of the Act

1. We have audited the internal financial controls with reference to financial statements of Carborundum Universal Limited ("the Company") as of March 31, 2019 in conjunction with our audit of the standalone Ind AS financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

2. The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

Auditors' Responsibility

3. Our responsibility is to express an opinion on the Company's internal financial controls with reference to financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the"Guidance Note") and the Standards on Auditing deemed to be prescribed under section 143(10) of the Act to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal financial controls and issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to financial statements was established and maintained and if such controls operated effectively in all material respects.

4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system with reference to financial statements and their operating effectiveness. Our audit of internal financial controls with reference to financial statements included obtaining an understanding of internal financial controls with reference to financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

5. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system with reference to financial statements.

Meaning of Internal Financial Controls with reference to financial statements

6. A company's internal financial controls with reference to financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial controls with reference to financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls with reference to financial statements

7. Because of the inherent limitations of internal financial controls with reference to financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to financial statements to future periods are subject to the risk that the internal financial controls with reference to financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

8. In our opinion, the Company has, in all material respects, an adequate internal financial controls system with reference to financial statements and such internal financial controls with reference to financial statements were operating effectively as at March 31, 2019, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For Price Waterhouse Chartered Accountants LLP
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership No. 100332

Place: Chennai
Date: April 26, 2019

Annexure B to Independent Auditors' Report

Referred to in paragraph 13 of the Independent Auditors' Report of even date to the members of Carborundum Universal Limited on the standalone Ind AS financial statements as of and for the year ended March 31, 2019

i. In respect of Property, plant and equipment:

(a) The Company is maintaining proper records showing full particulars, including quantitative details and situation, of Property, plant and equipment.

(b) The Property, plant and equipment are physically verified by the Management according to a phased programme designed to cover all the items at regular intervals which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. Pursuant to the programme, Property, plant and equipment has been physically verified by the Management during the year and no material discrepancies have been noticed on such verification.

(c) According to the information and explanations given to us and based on the examination of the registered title deeds provided to us, we report that the title deeds of all the immovable properties of land and buildings as disclosed in Note 4 are held in the name of the Company as at the Balance Sheet date; Immovable properties of land and buildings whose title deeds have been pledged as security for loans, guarantees, etc. are held in the name of the Company as per the Memorandum of Entry executed by the Company and confirmed by the banker as on the Balance Sheet date. In respect of immovable properties of land and buildings that have been taken on lease, the lease agreements are in the name of the Company where the Company is a lessee in the agreement.

ii. The physical verification of inventory, excluding stocks with third party warehouses, have been conducted at reasonable intervals by the Management during the year. In respect of inventory lying with third party warehouses, these have been confirmed by them. The discrepancies noticed on physical verification of inventory as compared to book records were not material.

iii. The Company has not granted any loans, secured or unsecured, to companies, firms, Limited Liability Partnerships or other parties covered in the register maintained under Section 189 of the Act. Therefore, the provisions of Clause 3(iii) of the said Order are not applicable to the Company.

iv. In our opinion, and according to the information and explanations given to us, the Company has not granted any loans or provided any guarantees or security to the parties covered under Section 185 of the Companies Act, 2013. The Company has complied with the provisions of Section 186 of the Companies Act, 2013 in respect of the loans and investments made, and guarantees and security provided by it.

v. The Company has not accepted any deposits from the public within the meaning of Sections 73, 74, 75 and 76 of the Act and the Rules framed there under to the extent notified.

vi. Pursuant to the rules made by the Central Government, the Company is required to maintain cost records as specified under Section 148(1) of the Act. We have broadly reviewed the same, and are of the opinion that, prima facie, the prescribed accounts and records have been made and maintained. We have not, however, made a detailed examination of the records with a view to determine whether they are accurate or complete.

vii. (a) According to the information and explanations given to us and the records of the Company examined by us, in our opinion, the Company is regular in depositing undisputed statutory dues, including provident fund, employees' state insurance, income tax, sales tax, service tax, duty of customs, duty of excise, value added tax, cess, goods and services tax, and other material statutory dues, as applicable, with the appropriate authorities.

(b) According to the information and explanations given to us and the records of the Company examined by us, there are no dues of duty of customs, value added tax and goods and services tax which have not been deposited on account of any dispute. The particulars of dues of income tax, sales tax, service tax and duty of excise as at March 31, 2019 which have not been deposited on account of a dispute, are as follows:

Name of the statute	Nature of dues	Amount (₹ in Million)*	Period to which the amount relates	Forum where the dispute is pending
Central Excise Act, 1944	Excise duty	0.95	1986-1987	High Court of Kerala
Central Excise Act, 1944	Excise duty	1.25	1993,1995-1996 and 1998 - 2003	The Customs, Excise & Service Tax Appellate Tribunal
Central Excise Act, 1944	Excise duty	0.95	1999 – 2000, 2009, 2010-11, 2011-12 to 2012-13	Commissioner of Central Excise (Appeals)
Finance Act, 1994	Service tax	0.85	2006 – 2010	The Customs, Excise & Service Tax Appellate Tribunal

Name of the statute	Nature of dues	Amount (₹ in Million)*	Period to which the amount relates	Forum where the dispute is pending
The Central Sales Tax Act, 1956	Central Sales Tax	0.47	1989 – 1990	High Court of Madras
Tamil Nadu General Sales Tax Act, 1959	Sales Tax	0.02	1995 – 1996	Sales Tax Appellate Tribunal, Chennai
The Central Sales Tax Act, 1956	Central Sales Tax	0.23	2002 – 2003	Sales Tax Appellate Tribunal, Chennai
The Central Sales Tax Act, 1956	Central Sales Tax	0.06	2004 – 2005	Commissioner Appeals
Tamil Nadu General Sales Tax Act, 1959	Sales Tax	0.66	2005 – 2006	Deputy Commissioner Appeals
The Central Sales Tax Act, 1956	Central Sales Tax	15.32	2005 - 2008 and 2012 – 2013	Deputy Commissioner Appeals
The Central Sales Tax Act, 1956	Central Sales Tax	1.43	2011 – 2012	Commercial Tax Appellate Board, Madhya Pradesh
The Central Sales Tax Act, 1956	Central Sales Tax	2.78	2013 – 2015	Assistant Commissioner Appeals
Income Tax Act, 1961	Income Tax	108.75	2009 – 2016	Commissioner of Income Tax (Appeals)

* Amount considered above is net of ₹78.01 Million paid under protest.

viii. According to the records of the Company examined by us and the information and explanations given to us, the Company has not defaulted in repayment of loans or borrowings to any financial institution or bank. The Company has not availed any loans or borrowings from Government nor has it issued any debentures.

ix. The Company has not raised any moneys by way of initial public offer, further public offer (including debt instruments) and term loans. Accordingly, the provisions of Clause 3(ix) of the Order are not applicable to the Company.

x. During the course of our examination of the books and records of the Company, carried out in accordance with the generally accepted auditing practices in India and according to the information and explanations given to us, we have neither come across any instance of material fraud by the Company or on the Company by its officers or employees, noticed or reported during the year, nor have we been informed of any such case by the Management.

xi. The Company has paid/provided for managerial remuneration in accordance with the requisite approvals mandated by the provisions of Section 197 read with Schedule V to the Act.

xii. As the Company is not a Nidhi Company and the Nidhi Rules, 2014 are not applicable to it, the provisions of Clause 3(xii) of the Order are not applicable to the Company.

xiii. In our opinion and according to the information and explanations given to us the Company is in compliance with Section 177 and 188 of the Companies Act 2013, where applicable, for all transactions with the related parties and the details of related party transactions have been disclosed in the financial statements as required under Indian Accounting Standards (Ind AS) 24 Related Party Disclosure specified under Section 133 of the Act.

xiv. The Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review. Accordingly, the provisions of Clause 3(xiv) of the Order are not applicable to the Company.

xv. The Company has not entered into any non-cash transactions with its directors or persons connected with him. Accordingly, the provisions of Clause 3(xv) of the Order are not applicable to the Company.

xvi. The Company is not required to be registered under Section 45-IA of the Reserve Bank of India Act, 1934. Accordingly, the provisions of Clause 3(xvi) of the Order are not applicable to the Company.

For Price Waterhouse Chartered Accountants LLP
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership No. 100332

Place: Chennai
Date: April 26, 2019

Balance Sheet

(in Indian Rupees million, unless otherwise stated)

Particulars	Notes	As at 31.03.2019	As at 31.03.2018
ASSETS			
Non-current assets			
(a) Property, plant and equipment	4A	3927.40	4255.96
(b) Capital work-in-progress	4B	224.88	169.63
(c) Intangible assets	5A	25.53	48.45
(d) Intangible assets under development	5B	-	0.29
(e) Financial assets			
(i) Investments			
(a) Investment in associate	6A	10.36	10.36
(b) Investment in joint ventures	6B	45.72	45.72
(c) Investment in subsidiaries	6C	2352.35	2352.35
(d) Other investments	6D	103.03	160.14
(ii) Other financial assets	7A	121.24	109.54
(f) Other non-current assets	8A	205.64	164.24
Total Non-Current assets		**7016.15**	**7316.68**
Current assets			
(a) Inventories	9	3390.34	2603.98
(b) Financial assets			
(i) Other investments	6E	935.65	544.79
(ii) Trade receivables	10	3305.07	3267.44
(iii) Cash and cash equivalents	11A	156.71	195.67
(iv) Bank balances other than (iii) above	11B	15.70	12.76
(v) Other financial assets	7B	54.01	46.95
(c) Other current assets	8B	384.17	370.33
Total Current assets		**8241.65**	**7041.92**
Total Assets		**15257.80**	**14358.60**
EQUITY AND LIABILITIES			
EQUITY			
(a) Equity share capital	12	189.15	188.96
(b) Other equity	13	12579.63	11507.74
Total Equity		**12768.78**	**11696.70**
LIABILITIES			
Non-Current liabilities			
(a) Financial liabilities			
Borrowings	14	2.69	10.78
(b) Provisions	15A	59.36	56.95
(c) Deferred tax liabilities (net)	16	212.01	260.79
Total Non-Current liabilities		**274.06**	**328.52**
Current liabilities			
(a) Financial liabilities			
(i) Trade payables			
(a) Total outstanding dues of micro enterprises and small enterprises	17	17.83	15.46
(b) Total outstanding dues of creditors other than micro enterprises and small enterprises	17	1452.10	1653.20
(ii) Other financial liabilities	18	640.06	564.23
(b) Provisions	15B	43.52	39.10
(c) Other current liabilities	19	61.45	61.39
Total Current liabilities		**2214.96**	**2333.38**
Total Liabilities		**2489.02**	**2661.90**
Total Equity and Liabilities		**15257.80**	**14358.60**
See accompanying notes forming part of the financial statements			

In terms of our report attached

On behalf of the Board

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
Chartered Accountants

M M Murugappan
Chairman

K Srinivasan
Managing Director

Subramanian Vivek
Partner
Membership Number: 100332

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Chennai
April 26, 2019

Statement of Profit and Loss

(in Indian Rupees million, unless otherwise stated)

S.No.	Particulars	Notes	For the year	
			2018-19	2017-18
I	Revenue from Operations	20	17822.20	16022.82
II	Other income	21	269.20	310.37
III	**Total Income (I+II)**		**18091.40**	**16333.19**
IV	**Expenses**			
	Cost of material consumed		6990.44	5796.17
	Purchases of stock-in-trade		795.16	709.25
	Changes in inventories of finished goods, stock-in-trade and work-in-progress	22	(265.43)	137.76
	Excise duty on sale of goods		-	260.49
	Employee benefits expense	23	1821.19	1741.96
	Finance costs	24	9.38	14.67
	Depreciation and amortisation expense	25	754.00	738.88
	Other expenses	26	5507.55	4882.08
	Total expenses (IV)		**15612.29**	**14281.26**
V	**Profit before tax (III-IV)**		**2479.11**	**2051.93**
VI	**Tax expense**			
	(1) Current tax	27A	867.00	697.00
	(2) Deferred tax	16	(48.78)	(79.86)
	Total tax [VI]		**818.22**	**617.14**
VII	**Profit for the year (V - VI)**		**1660.89**	**1434.79**
VIII	**Other Comprehensive Income [OCI]**			
A	(i) Items that will not be reclassified to profit or loss			
	(a) Remeasurement of the defined benefit plans		24.77	3.32
	(b) Equity instruments through OCI		(57.81)	26.63
	(ii) Income tax relating to items that will not be reclassified to profit or loss	27B	-	-
	Total Other Comprehensive Income (VIII)		**(33.04)**	**29.95**
IX	**Total Comprehensive Income for the year (VII + VIII)**		**1627.85**	**1464.74**
X	**Earnings per equity share (₹1 each) on profit for the year (VII)**	28		
	- Basic		8.79	7.60
	- Diluted		8.77	7.58
	See accompanying notes forming part of the financial statements			

In terms of our report attached

On behalf of the Board

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
Chartered Accountants

M M Murugappan
Chairman

K Srinivasan
Managing Director

Subramanian Vivek
Partner
Membership Number: 100332

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Chennai
April 26, 2019

Statement of changes in equity

(in Indian Rupees million, unless otherwise stated)

A. Equity share capital - Refer Note: 12

Balance as at March 31, 2017	**188.66**
Changes in equity share capital during the year	
Shares issued against Employee Stock Options Scheme/Plan	0.30
Balance as at March 31, 2018	**188.96**
Changes in equity share capital during the year	
Shares issued against Employee Stock Options Scheme/Plan	0.19
Balance as at March 31, 2019	**189.15**

B. Statement of changes in other equity

Particulars	Reserves and Surplus - Refer Note: 13A						Items of Other Comprehensive Income - Refer Note: 13B		Share application money pending allotment - Refer Note: 13C	Total
	Profit on Forfeiture of Shares / Warrants	Capital redemption reserve	Securities premium	General Reserve	Share options outstanding account	Retained Earnings	Reserve for equity instruments	Revaluation surplus		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
Balance at the beginning of the year - March 31, 2017	**6.03**	**27.68**	**194.15**	**6175.43**	**16.08**	**3860.74**	**57.79**	**23.74**		**10361.64**
Profit for the year						1434.79				1434.79
Other Comprehensive income for the year						3.32	26.63			29.95
Total Comprehensive income for the year	**-**	**-**	**-**	**-**	**-**	**1438.11**	**26.63**	**-**	**-**	**1464.74**
Share premium received on allotment of equity shares under ESOP			32.04			-				32.04
Share application money pending for allotment									0.23	0.23
Recognition of share-based payments					14.76					14.76
Final dividend paid during the year						(141.51)				(141.51)
Dividend tax on Final dividend						(14.92)				(14.92)
Interim dividend paid during the year						(188.93)				(188.93)
Dividend tax on Interim dividend paid during the year						(20.31)				(20.31)
Transfer to General Reserve				500.00		(500.00)				-
Balance at the end of the year - March 31, 2018	**6.03**	**27.68**	**226.19**	**6675.43**	**30.84**	**4433.18**	**84.42**	**23.74**	**0.23**	**11507.74**
Profit for the year						1660.89				1660.89
Other Comprehensive income for the year						24.77	(57.81)			(33.04)
Total Comprehensive income for the year	**-**	**-**	**-**	**-**	**-**	**1685.66**	**(57.81)**	**-**	**-**	**1627.85**
Share premium received on allotment of equity shares under ESOP			27.92							27.92
Share application money pending for allotment									(0.23)	(0.23)
Recognition of share-based payments					15.85					15.85
Final dividend paid during the year						(236.30)				(236.30)
Dividend tax on Final dividend						(35.27)				(35.27)
Interim dividend paid during the year						(283.71)				(283.71)
Dividend tax on Interim dividend paid during the year						(44.22)				(44.22)
Transfer to General Reserve				500.00		(500.00)				-
Balance at the end of the year - March 31, 2019	**6.03**	**27.68**	**254.11**	**7175.43**	**46.69**	**5019.34**	**26.61**	**23.74**	**-**	**12579.63**

See accompanying notes forming part of the financial statements

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner
Membership Number: 100332

Chennai
April 26, 2019

On behalf of the Board

M M Murugappan
Chairman

K Srinivasan
Managing Director

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Cash flow Statement
(in Indian Rupees million, unless otherwise stated)

Particulars		For the year		
	2018-19		2017-18	
A. Cash flow from operating activities				
Profit before Tax		**2479.11**		**2051.93**
Adjustment for:				
Depreciation and amortisation expense	754.00		738.88	
Fair valuation of investments	(0.70)		(0.78)	
Finance costs	9.38		14.67	
Interest income	(9.69)		(4.99)	
Dividend income	(226.19)		(285.34)	
Expenses recognised in respect of equity-settled share-based payments	15.85		14.76	
Allowance for doubtful receivable and advances	31.14		31.21	
Reversal of allowance for doubtful receivables and advances	(16.50)		(10.41)	
Provision for expenses no longer required written back	(7.82)		(2.94)	
(Profit)/Loss on sale of assets (net)	(3.90)		3.17	
Unrealised exchange (gain)/loss-net	16.04	561.61	(17.72)	480.51
Operating profit before working capital changes		**3040.72**		**2532.44**
Movement in working capital				
(Increase)/decrease in trade receivables	(74.35)		(698.43)	
(Increase)/decrease in inventories	(786.36)		(336.26)	
(Increase)/decrease in other financial assets	(19.93)		(13.91)	
(Increase)/decrease in other assets	(31.52)		170.02	
Increase/(decrease) in trade payables	(158.94)		327.21	
Increase/(decrease) in provision and other current liabilities	6.89		(42.42)	
Increase/(decrease) in other financial liabilities	60.68	(1003.53)	62.39	(531.40)
Cash generated from Operations		**2037.19**		**2001.04**
Income tax paid		(820.00)		(685.00)
Net cash generated by Operating activities [A]		**1217.19**		**1316.04**
B. Cash flow from investing activities				
Payments to acquire property, plant and equipment	(518.01)		(578.45)	
Payments for intangible assets	(5.50)		(5.37)	
Proceeds from sale of property, plant and equipment	12.48		6.53	
Interest income received	9.68		4.98	
Dividend income received	226.19		285.34	
Net cash (used in) investing activities [B]		**(275.16)**		**(286.97)**
C. Cash flow from financing activities				
Proceeds from issue of equity shares	27.88		32.34	
Share application money pending allotment	-		0.23	
(Repayment) of long-term borrowings - net	(9.13)		(7.89)	
Finance costs paid	(9.38)		(14.67)	
Dividends paid	(520.01)		(330.44)	
Tax on dividend	(79.49)		(35.23)	
Net cash (used in) financing activities [C]		**(590.13)**		**(355.66)**
Net increase/(decrease) in cash and cash equivalents(A+B+C) [D]		**351.90**		**673.41**
Add: Cash and Cash equivalents at the beginning of the year		740.46		67.05
Cash and Cash equivalents at the end of the year		**1092.36**		**740.46**
Reconciliation of Cash and cash equivalents with the Balance Sheet:				
Cash and Cash equivalents at the beginning of the year				
Cash and cash equivalents - Refer Note: 11A		195.67		67.05
Current investment considered as Cash and Cash equivalents - Refer Note: 6E		544.79		-
		740.46		**67.05**
Cash and cash equivalents at the end of the year				
Cash and cash equivalents - Refer Note: 11A		156.71		195.67
Current investment considered as Cash and Cash equivalents - Refer Note: 6E		935.65		544.79
		1092.36		**740.46**
See accompanying notes forming part of the financial statements				

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
Chartered Accountants

Subramanian Vivek
Partner, Membership Number: 100332
Chennai
April 26, 2019

On behalf of the Board

M M Murugappan
Chairman

K Srinivasan
Managing Director

Jagannathan Chakravarthi Narasimhan
Chief Financial Officer

Rekha Surendhiran
Company Secretary

Statement showing the applicable Key Accounting Standards (Ind AS) with related Policy & Notes references as per Standalone financial statements.

Ind AS No.	Description	Accounting policy Reference	Note Reference
2	Inventories	3.16	9
7	Statement of Cash flows	3.15	11,14
8	Accounting Policies, Changes in Accounting Estimates and Errors		46
10	Event after the reporting period		45,48
12	Income taxes	3.10	27,16
16	Property, plant and equipment	3.11	4,25
17	Leases	3.23	4,42
115	Revenue from Contracts with Customers	3.4	20,29,19
19	Employee benefits	3.8	23,33
24	Related party disclosures		35
28	Investments in associates and joint ventures		6A,6B
33	Earnings per share	3.24	28
36	Impairment of assets	3.13	4,5
37	Provisions, Contingent liabilities and Contingent assets	3.17,3.18	15,30
38	Intangible assets	3.12	5,25
102	Share based payment	3.9	23,36
103	Business combinations	3.12.3	
105	Non current Assets held for sale and discontinued operations	3.3	
107	Financial Instruments - Disclosures	3.19,3.26,3.27	10,14,17,21,34
108	Operating segments	3.22	29
113	Fair value measurement		34

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019

1. General information

Carborundum Universal Limited (CUMI) was incorporated in India as a Public Limited Company in 1954 and the shares of the Company are listed in National Stock Exchange of India Ltd. and BSE Ltd. The address of its registered office and place of business are disclosed in the annual report.

CUMI manufactures and sells mainly Abrasives, Ceramics (Industrial Ceramics, Refractories) and Electrominerals. (Refer Note: 29).

2. Basis of Preparation:

2.1 Application of Indian Accounting Standards (Ind AS)

The financial statements comply in all material aspects with Indian Accounting Standards (Ind AS) notified under Section 133 of the Companies Act, 2013 (the Act) [Companies (Indian Accounting Standards) Rules, 2015] and other relevant provisions of the Act.

2.2 New and amended Standard adopted by the Company:

The Company has applied the following standards and amendments for the first time in its annual reporting period commencing April 01, 2018:

- Ind AS 115, Revenue from Contract with Customers
- Amendment to Ind AS 20, Accounting for Government Grants and Disclosure of Government Assistance
- Appendix B, Foreign Currency Transactions and Advance consideration to Ind AS 21, the Effect of Changes in Foreign Exchange Rates
- Amendment to Ind AS 12, Income taxes
- Amendment to Ind AS 28, Investment in Associate and Joint ventures and Ind AS 112, Disclosure of Interest in Other entities.

The Company had to change its accounting policies and applied modified retrospective approach on application of Ind AS 115. The impact is disclosed under Note 20(ii). The other amendments listed above did not have any impact on the amount recognised in prior periods and are not expected to significantly affect the current or future periods.

3. Significant accounting policies

3.1.1 Basis of preparation and presentation

The financial statements have been prepared on the historical cost basis as explained in the accounting policies as stated below, except the following that are measured at fair values at the end of each reporting period:

- Certain financial asset and liabilities (including derivate instruments) and contingent consideration is measured at fair value
- Assets held for sale - measured at fair value less cost to sell
- Defined benefit plan - plan measured at fair value
- Share based payments

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the company.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

3.2 Use of estimates and judgements

In preparing these financial statements, management has made judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

3.2.1 Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

3.2.2 Judgements are made in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements.

3.2.3 Assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment are reviewed on an ongoing basis.

The areas involving critical estimates or judgements are:

S.No	Particulars	Notes
I	Estimation of useful life of tangible and intangible asset	3.11 & 3.12
II	Estimation of fair value of unlisted securities	6D
III	Impairment of Trade receivables: Expected credit loss	10
IV	Recognition and measurement of provisions and contingencies; Key assumptions about the likelihood and magnitude of an outflow of resources.	15 & 30
V	Measurement of defined benefit obligation: Key actuarial assumptions.	33

3.3 Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal) is available for immediate sale in its present condition subject only to terms that are usual and customary for sale of such assets and its sales is highly probable.

Non-current assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

3.4 Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured, regardless of when the payment is being made.

Revenue is measured at the transaction price for each separate performance obligation, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. The transaction price is net of estimated customer returns, rebates and other similar allowances.

The specific recognition criteria described below must also be met before revenue is recognised.

3.4.1 Sale of goods

Revenue from the sale of goods is recognized at a point in time when the control of the products has transferred which generally coincides with dispatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales.

Revenue from the sale of goods is recognised when the control of the product is transferred, the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- the Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The Company has a present right to payment for the asset.
- The Company has transferred physical possession of the asset, whereby the customer has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset or to restrict the access of other entities to those benefits.

When the consideration is received, before the Company transfers goods to the customer, the Company shall present the consideration as a contract liability.

3.4.2 Rendering of services

Revenue from divisible service contracts:

a) service contracts are recognised over a period of time determined using the percentage completion method, synchronized to the billing schedules agreed by the customers, identical with others in similar business and

b) the revenue relating to supplies are measured in line with policy set out in 3.4.1

In respect of indivisible contracts, the revenues are recognised over a period of time, measured as per (a) above.

When the consideration is received, before the Company transfers goods to the customer, the Company shall present the consideration as a contract liability and when the services rendered by the Company exceed the payment, a contract asset is recognised excluding any amount presented as receivable.

3.4.3 Other income

Royalty income is recognised on an accrual basis in accordance with the substance of the relevant agreement.

Dividend income from investments is recognised when the shareholder's right to receive payment has been established.

Interest income from a financial asset is recognised and accrued using effective interest rate method.

Rental income is recognised on a straight line basis in accordance with the agreement.

3.5 Foreign Currencies

Foreign currency transactions are recorded at the rates of exchange prevailing on the date of the transactions. Monetary assets and liabilities outstanding at the year-end are translated at the rate of exchange prevailing at the year-end and the gain or loss, is recognised in the Statement of Profit and Loss.

Foreign currency monetary items (other than derivative contracts) of the Company, outstanding at the Balance Sheet date are restated at the year-end rates. Non-monetary items of the Company are carried at historical cost.

Exchange differences arising on settlement / restatement of short-term foreign currency monetary assets and liabilities of the Company are recognised as income or expense in the Statement of Profit and Loss.

Refer Note: 3.26 and 3.27 for accounting for forward exchange contracts relating to firm commitments and highly probable forecast transactions.

3.6 Borrowing costs

The borrowing costs (other than those attributable to fixed assets - Refer Note: 4 and 5) are recognised in profit or loss in the period in which they are incurred.

Interest income earned on temporary investment of specific borrowing spending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

3.7 Government grants

Government grants are not recognised until there is reasonable assurance that the Company will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the company recognises as expenses the related cost for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the company should purchase, construct or otherwise acquire non-current assets are recognised as deferred revenue in the Balance Sheet and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the company with no future related costs are recognised in profit or loss in the period in which they become receivable.

The benefit of a government loan at a below market rate of interest is treated as a government grant, measured as the differences between proceeds received and the fair value of the loan based on prevailing market interest rate.

Export benefits on account of entitlement to import goods free of duty under 'Exports Benefit Scheme' are accounted based on eligibility and when there is no uncertainty in receiving the same.

3.8 Employee benefits

3.8.1 Retirement benefit costs and termination benefits

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gain and loss, the effect of the changes to asset ceiling (if applicable) and the return on plan assets (excluding net interest), is reflected immediately in the Balance Sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Re-measurement recognised in other comprehensive income is reflected in retained earnings and is not reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of plan amendment. Net interest is calculated by applying the rate at the beginning of the period to the net defined benefit liability or asset.

Defined benefit costs are categorised as follows:

- Service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- Net interest expense or income;
- Remeasurement.

The company presents the first two components of defined benefit costs in profit or loss in the line item 'Employee benefit expense'. Curtailment gain and loss are accounted for as past service costs.

A liability for a termination benefit is recognised when the entity can no longer withdraw the offer of the termination benefit as per the relevant scheme.

The employees and the Company make monthly fixed contributions to the Carborundum Universal Limited Employee's Provident Fund Trust, equal to a specified percentage of the covered employee's salary. The interest rate payable by the Trust to the beneficiaries is being notified by the Government every year. The Company obtains an independent actuarial valuation of the Interest Guarantees as at the Balance Sheet date and provides for the shortfall, if any, in the present value of obligation of interest over the fair value of the surplus in the Fund.

3.8.2 Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date.

3.8.3 Voluntary retirement compensation

Compensation to employees who have retired under voluntary retirement scheme is charged off to revenue.

3.9 Share-based payment arrangements

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date. Details regarding the determination of the fair value of equity settled share based transactions are set out in Note: 36.

The fair value determined at the grant date of the equity-settled-based payments is expensed on a straight-line basis over the vesting period, based on the company's estimate of equity instruments that will eventually vest, with a corresponding increase in equity. At the end of each reporting period, the company revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflect the revised estimate, with a corresponding adjustment to the Share options outstanding account.

3.10 Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

3.10.1 Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from 'profit before tax' as reported in the Statement of Profit and Loss because of items of income or expense that are taxable or deductible in other years (Temporary differences) and items that are never taxable or deductible (Permanent differences). The Company's current tax is calculated using tax rates that have been enacted by the end of the reporting period.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities.

Current income tax relating to items recognised outside profit or loss is either in other comprehensive income or in equity. Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

3.10.2 Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary differences arise from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised either in other comprehensive income or in equity. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

3.10.3 Indirect taxes

GST/CENVAT/VAT credit on materials purchased/services availed for production / Input services are taken into account at the time of purchase. Service tax input credit is accounted for in the books in the period in which the underlying service received is accounted and when there is no uncertainty in availing/utilising the credits. GST/CENVAT/VAT Credit on purchase of capital items wherever applicable are taken into account as and when the assets are acquired. The GST/CENVAT credits so taken are utilised for payment of GST on supply and service/excise duty on goods manufactured or for payment of service tax on services rendered. The unutilised GST/CENVAT/VAT credit is carried forward in the books.

3.11 Property, plant and equipment

Land and buildings held for use in the production or supply of goods or services, or for administrative purposes, are stated in the Balance Sheet at cost less accumulated depreciation and accumulated impairment losses. Freehold land is not depreciated.

Fixtures and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Depreciation is recognised so as to write off the cost of the assets (other than freehold land) less their residual values over their useful lives as specified under Schedule II and applicable statutes of the relevant territories, using the straight-line method. The estimated useful lives, residual value and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance lease are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

Buildings on lease hold land are depreciated over the lease period if it is lower than the useful life mentioned in Schedule II.

Individual asset costing less than ₹5000 are depreciated in full in the year of acquisition.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sale proceeds and the carrying amount of the asset and is recognised in profit or loss.

When significant parts of plant and equipment are required to be replaced at intervals, the company depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement when the asset is derecognised.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

3.12 Intangible assets

3.12.1 Intangible assets acquired separately

Intangible assets that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives.

The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The amortisation expense on intangible assets with finite lives is recognised in the Statement of Profit and Loss unless such expenditure forms part of carrying value of another asset.

3.12.2 Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

3.12.3 Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognised separately from goodwill are initially recognised at their fair value at the acquisition date, which is regarded as their cost.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

3.12.4 De-recognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gain or loss arising from de-recognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, and are recognised in profit or loss when the asset is derecognised.

3.13 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the company reviews the carrying amount of tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the assets is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is higher of fair value less cost of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generated unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

3.14 Cash and cash equivalents (for purposes of Cash Flow Statement)

Cash comprises cash on hand and demand deposits with banks. Cash equivalents are short-term balances (with an original maturity of three months or less from the date of acquisition), highly liquid investments that are readily convertible into known amounts of cash and which are subject to insignificant risk of changes in value.

3.15 Cash Flow Statement

Cash flows are reported using the indirect method, whereby profit/ (loss) before tax is adjusted for the effects of transactions of non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Company are segregated based on the available information.

3.16 Inventories

Inventories are stated at the lower of cost and net-realisable value. Cost includes freight, taxes and duties net of GST/CENVAT / VAT credit wherever applicable. Customs duty payable on material in bonded warehouse is added to the cost.

In respect of raw materials, stores and spare parts, traded stock cost is determined on weighted average basis. In respect of work in progress and finished goods, cost includes all direct costs and applicable production overheads, to bring the goods to the present location and condition. Net realisable value represents the estimated selling price for inventories less all estimated cost of completion and cost necessary to make the sale.

3.17 Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle present obligation at the end of reporting period, taking into account the risk and uncertainty surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of these cash flows (when the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of receivable can be measured reliably.

3.18 Contingent liabilities

Contingent liability is disclosed for (i) Possible obligation which will be confirmed only by future events not wholly within the control of the Company or (ii) Present obligations arising from past events where it is not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount of the obligation cannot be made. Contingent assets are not recognised in the financial statements.

3.19 Financial instruments

Financial assets and financial liabilities are recognised when the company becomes a party to the contractual provision of the instruments. Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial asset or financial liabilities, as appropriate, on initial recognition. Transaction cost directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

3.20 Financial assets

All regular way purchases or sale of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sale of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

All recognised financial assets are subsequently measured in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

3.20.1 Classification of financial assets

Debt instruments that meet the following conditions are subsequently measured at amortised cost (except for debt instruments that are designated as at fair value through profit or loss on initial recognition):

- the asset is held within business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instruments give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For the impairment policy on financial assets measured at amortised cost, Refer Note: 3.20.4

3.20.2 Investment in equity instruments at Fair value through Other Comprehensive Income [FVTOCI]

On initial recognition, the company can make an irrevocable election (on an instrument-by instrument basis) to present the subsequent changes in fair value in other comprehensive income pertaining to investment in equity instruments. This election is not permitted if the equity investment is held for trading.

These elected investments are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gain and loss arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instrument through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on disposal of the investments.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term.
- on initial recognition it is part of a portfolio of identified financial instruments that the company manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument or a financial guarantee.

The company has equity instrument in two entities, which are not held for trading. The company has elected the FVTOCI irrevocable option for both of these investments (Refer Note: 6D). Fair value is determined in the manner described in Note: 34.

Dividend on these investments are recognised in profit or loss when the company's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity, which does not represent a recovery of part of cost of the investment and the amount of dividend can be measured reliably. Dividend recognised in profit and loss is included in 'Other income' line item.

3.20.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the company irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading (Refer Note: 3.20.2).

Debt instruments that do not meet the amortised cost criteria or FVTOCI criteria are measured at FVTPL. In addition, debt instruments that meet the amortised cost criteria or the FVTOCI criteria but are designated as at FVTPL are measured at FVTPL.

A financial asset that meets the amortised cost criteria or debt instruments that meet the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gain or loss on them on different bases. The company has not designated any such debt instrument as at FVTPL.

Financial asset at FVTPL is measured at fair value at the end of each reporting period, with gains or losses arising on re-measurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporate any dividend or interest earned on the financial asset and is included in the 'Other income' line item. Dividend on financial asset at FVTPL is recognised when the company's right to receive the dividends is established. It is probable that the economic benefits associated with the dividend will flow to the entity which does not represent a recovery of part of cost of the investment and the amount can be measured reliably.

3.20.4 Impairment of financial assets

The company applied the expected credit loss model for recognising impairment loss on financial assets measured at amortised cost, debt instruments at FVTOCI, lease receivable, trade receivable, and other contractual rights to receive cash or other financial asset, and financial guarantees not designated as at FVTPL.

Expected credit losses are the weighted average of credit losses with the respective risks of default occurring as the weights. Credit loss is the difference between all contractual cash flows that are due to the company in accordance with the contract and all the cash flows that the company expects to receive (i.e., all cash shortfalls), discounted at the original effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impairment financial assets). The company estimates cash flows by considering all contractual terms of the financial instrument (for example: prepayments, extension, call and similar options) through the expected life of that financial instrument.

The company measures the loss allowance for the financial instruments at an amount equal to the lifetime expected credit losses if the credit risk on those financial instruments has increased significantly since initial recognition.

If the credit risk on a financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instruments at an amount equal to 12 month expected credit losses. The twelve months expected credit losses are a portion of the lifetime cash shortfalls that will result if default occurs within 12 months after the reporting date and thus, are not cash shortfalls that are predicted over 12 months.

If the company measured loss allowance for the financial instruments at life time expected credit loss model in the previous period, but determines at the end of a reporting period that the credit risk has not increased significantly since initial recognition due to improvement in credit quality as compared to the previous period, the company again measures the loss allowance based on 12 month expected credit losses.

When making the assessment of whether there has been a significant increase in credit risk since initial recognition, the company uses the change in the risk of a default occurring over the expected life of the financial instruments instead of the change in the amount of expected credit losses. To make the assessment, the company compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increase in credit risk since initial recognition.

For trade receivables or any contractual rights to receive cash or other financial assets that results from transactions that are within the scope of Ind AS 115, the company always measures the loss allowance at an amount equal to life time expected credit losses.

Further, for the purposes of measuring lifetime expected credit loss allowance for trade receivables, the Company has used a practical expedient as permitted under Ind AS 109. This expected credit loss allowance is computed based on a provision matrix which takes into account historical credit loss experience and adjusted for forward-looking information.

The impairment requirements for the recognition and measurement of a loss allowance are equally applied to debt instruments at FVTOCI except that the loss allowance is recognised in Other Comprehensive Income and is not reduced from the carrying amount in the Balance Sheet.

3.20.5 Derecognition of financial assets

The company derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Company neither transfers nor retains subsequently all the risks and rewards of ownership and continues to control the transferred asset, the Company recognises its retained interest in the asset and an associated liability for the amount it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On de-recognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss if such gain or loss would have otherwise been recognised in profit or loss on disposal of that financial asset.

On de-recognition of a financial asset other than its entirety (eg., when the company retains an option to repurchase part of a transferred asset), the company allocates the previous carried over amount of financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer.

The difference between the carrying amount allocated to the part that is no longer recognised and the sum of consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in profit or loss on disposal of that financial asset. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair value of those parts.

3.20.6 Foreign exchange gain and loss

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period.

- For Foreign currency denominated financial asset measured at amortised cost and FVTPL, the exchange differences are recognised in profit or loss except for those which are designated hedging instruments in a hedging relationship.
- Changes in the carrying amount of investments in equity instruments at FVTOCI relating to changes in foreign currency rates are recognised in Other Comprehensive Income.

- For the purposes of recognising foreign exchange gain and loss, FVTOCI debt instruments are treated as financial assets measured at amortised cost. Thus, the exchange differences on the amortised cost are recognised in profit or loss and other changes in the fair value of FVTOCI financial asset are recognised in Other Comprehensive Income.

3.21 Financial liabilities and equity instruments

3.21.1 Classification as debt or equity

Debt and equity instruments issued by a Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definition of a financial liabilities and an equity instrument.

3.21.2 Equity instruments

An equity instrument is a contract that evidences a residual interest in the asset of an entity after deducting all of its liabilities. Equity instruments issued by a Company are recognised at the proceeds received,net of direct issue costs.

3.21.3 Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest methods or at FVTPL.

However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, financial guarantee contracts issued by the Company and commitments issued by the Company to provide a loan at below-market interest rate are measured in accordance with the specific accounting policies set out below:

3.21.3.1. Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either contingent consideration recognised by the Company as an acquirer in a business combination to which Ind AS 103 applies or is held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition, it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration recognised by the Company as an acquirer in a business combination to which Ind AS 103 applies, may be designated as at FVTPL upon initial recognition if:

- Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise.
- the financial liability forms part of a company of financial asset or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind AS 109 permits the entire combined contracts to be designated as at FVTPL in accordance with Ind AS 109.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on re-measurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in the 'Other income' line item.

However, for not-held for trading financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of the liability recognised in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss, in which case these effect of changes in credit risk are recognised in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognised in other comprehensive income are reflected immediately in retained earnings and are not subsequently reclassified to profit or loss.

Gain or loss on financial guarantee contract and loan commitments issued by the Company that are designated by the Company as at fair value through profit or loss is recognised in profit or loss. Fair value is determined in the manner described in Note: 34.

3.21.3.2 Financial liabilities subsequently measured at amortised cost

Financial liabilities are not held-for-trading and are not designated as at FVTPL are measured at amortised cost at the end of subsequent accounting periods. The carrying amounts of financial liabilities that are subsequently measured at amortised cost are determined based on the effective interest method. Interest expenses that are not capitalised as part of cost of an asset is included in the 'Finance cost' line item.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability or, (where appropriate), a shorter period, to the net carrying amount on initial recognition.

3.21.3.3 Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantee contracts issued by a Company are initially measured at their fair value and, if not designated as at FVTPL, are subsequently measured at a higher of:

- the amount of loss allowance determined in accordance with impairment requirement of Ind AS 109; and

- the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of Ind AS 115.

3.21.3.4 Foreign exchange gain and loss

For financial liabilities that are denominated in a foreign currency and are measured at amortised cost at the end of each reporting period, the foreign exchange gain and loss are determined based on the amortised cost of the instruments and are recognised in 'Other income'.

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. For financial liabilities that are measured at FVTPL, the foreign exchange component forms part of the fair value gain or loss and is recognised in profit or loss.

3.21.3.5 De-recognition of financial liabilities

The Company derecognises financial liabilities when, and only when, the Company's obligations are discharged, cancelled or have expired. An exchange between lenders of debt instruments with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability.Similarly, a substantial modification of the terms of an existing financial liability (whether or not attributable to the financial difficulty of the debtor) is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

3.22 Segment reporting

The accounting policies adopted for Segment reporting are in line with the accounting policies of the Company with the following additional policies:

- Inter-segment revenue is accounted on the basis of transactions which are primarily determined based on market/fair value factors.
- Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities of the Segment. Revenue and expenses, which relate to the enterprise as a whole and are not allocable to Segments on a reasonable basis, have been included under "Un-allocated Corporate expenses".

3.23 Leases

Assets leased by the Company in its capacity as a lessee, where substantially all the risks and rewards of ownership vest in the Company are classified as finance leases. Such leases are capitalised at the inception of the lease at the lower of the fair value and the present value of the minimum lease payments and a liability is created for an equivalent amount. Each lease rental paid is allocated between the liability and the interest cost so as to obtain a constant periodic rate of interest on the outstanding liability for each year.

3.24 Earnings per share

Basic earnings per share is computed by dividing the profit/(loss) after tax by the weighted average number of equity shares outstanding during the year. Diluted earnings per share is computed by dividing the profit/(loss) after tax as adjusted for dividend, interest and other charges to expense or income relating to the dilutive potential equity shares, by the weighted average number of equity shares considered for deriving basic earnings per share and the weighted average number of equity shares which could have been issued on the conversion of all dilutive potential equity shares.

Potential equity shares are deemed to be dilutive only if their conversion to equity shares would decrease the net profit per share from continuing ordinary operations. Potential dilutive equity shares are deemed to be converted as at the beginning of the period, unless they have been issued at a later date. The dilutive potential equity shares are adjusted for the proceeds receivable had the shares been actually issued at fair value (i.e. average market value of the outstanding shares). Dilutive potential equity shares are determined independently for each period presented. The number of equity shares and potentially dilutive equity shares are adjusted for share splits/reverse share splits and bonus shares, as appropriate.

3.25 Research and Development

All revenue expenditure related to research and developments are charged to the respective heads on the Statement of Profit and Loss. Capital expenditure incurred on research and development is capitalised as fixed assets and depreciated in accordance with the depreciation policy of the Company.

3.26 Derivative financial instruments

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently re-measured to their fair values at the end of each reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivate is designated and effective as hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedging relationship and the nature of the hedged item.

3.27 Hedge accounting

The Company designates certain hedging instruments, which includes derivatives and non-derivatives in respect of foreign currency risk, at either fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm Commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Company documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

3.27.1 Fair value hedges

Changes in fair value of the designated portion of derivatives that qualify as fair value hedges are recognised in profit or loss immediately, together with any changes in the fair value of the hedging asset or liability that are attributable to the hedged risk. The change in the fair value of the designated portion of hedging instrument and the change in the hedged item attributable to the hedged risk are recognised in profit or loss in the line item relating to the hedged item.

Hedge accounting is discontinued when the hedging instruments expires or is sold, terminated, or exercised, or when it no longer qualify for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.

3.27.2 Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, and is included in the 'Other income' line item.

Amount previously recognised in other comprehensive income and accumulated in equity relating to (effective portion as described above) are reclassified to profit or loss in the periods when the hedged item affect profit or loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of non-financial asset or a non-financial liability, such gain or loss are transferred from equity (but not as a reclassification adjustment) and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

In cases, where the designated hedging instruments are options and forward contracts, the Company has an option, for each designation, to designate on an instrument only the changes in intrinsic value of the option and spot element of forward contract respectively as hedges. In such cases the time value of the options is accounted based on the type of hedged item which those options hedge.

In case of transaction related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e. Reserve for time value of options and forward elements of forward contract in hedging relationship. This separate component is removed and directly included in the initial cost or other carrying amount of the asset or the liability (i.e. not as a reclassification adjustment thus not affecting other comprehensive income) if the hedged item subsequently results in recognition of a non-financial asset or non-financial liability. In other cases, the amount accumulated is reclassified to profit or loss as a reclassification adjustment in the same period in which the hedged expected future cash flow affects profit or loss.

In case of time period related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e. Reserve for time value of options and forward elements of forward contracts in hedging relationship. The time value of options at the date of designation of the options in the hedging relationship is amortised on a systematic and rational basis over the period during which the options intrinsic value could affect profit or loss. This is done as a reclassification adjustment and hence affects Other Comprehensive Income.

In cases where only the spot element of the forward contracts is designated in a hedging relationship and the forward element of the forward contract is not designated, the Company makes the choice for each designation whether to recognise the changes in forward element of fair value of the forward contracts in profit or loss or to account for this element similar to the time value of option (as described above).

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecasted transactions is ultimately recognised in profit or loss. When a forecasted transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

3.28 Insurance claims

Insurance claims are accounted for on the basis of claims admitted/ expected to be admitted and to the extent that the amount recoverable can be measured reliably and it is reasonable to expect ultimate collection.

3.29 Operating cycle

Based on the nature of the products/activities of the Company and the normal time between acquisition of assets and their realisation in cash or cash equivalents, the Company has determined its operating cycle as 12 months for the purpose of classification of its assets and liabilities as current and non-current.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

4. Property, plant and equipment

Particulars	As at 31.03.2019	As at 31.03.2018
A. Carrying amounts		
Freehold land	37.86	37.86
Buildings	1221.29	1227.05
Plant and equipment	2603.92	2924.59
Furniture and fittings	35.60	40.82
Vehicles	24.12	13.14
Vehicles under finance lease	4.61	12.50
Total	**3927.40**	**4255.96**
B. Capital work-in-progress:	**224.88**	**169.63**

Cost	Freehold land	Buildings (a)	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
Balance at March 31, 2017	**37.86**	**1305.81**	**3765.92**	**64.77**	**8.64**	**34.45**	**5217.45**
Additions - **(b)**	-	98.04	848.48	11.07	8.38	0.70	966.67
Disposals	-	(4.35)	(63.31)	(7.30)	(1.54)	(1.51)	(78.01)
Balance at March 31, 2018	**37.86**	**1399.50**	**4551.09**	**68.54**	**15.48**	**33.64**	**6106.11**
Additions - **(b)**	-	59.96	324.82	5.01	15.52	-	405.31
Disposals	-	-	(13.40)	(0.50)	(3.04)	(11.65)	(28.59)
Balance at March 31, 2019	**37.86**	**1459.46**	**4862.51**	**73.05**	**27.96**	**21.99**	**6482.83**

Accumulated depreciation and impairment	Freehold land	Buildings	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
Balance at March 31, 2017	**-**	**111.07**	**1062.34**	**24.50**	**2.16**	**13.37**	**1213.44**
Depreciation expense	-	62.68	621.15	10.51	1.72	8.96	705.02
Eliminated on disposals	-	(1.30)	(56.99)	(7.29)	(1.54)	(1.19)	(68.31)
Balance at March 31, 2018	**-**	**172.45**	**1626.50**	**27.72**	**2.34**	**21.14**	**1850.15**
Depreciation expense	-	65.72	639.90	10.20	2.62	6.85	725.29
Eliminated on disposals	-	-	(7.81)	(0.47)	(1.12)	(10.61)	(20.01)
Balance at March 31, 2019	**-**	**238.17**	**2258.59**	**37.45**	**3.84**	**17.38**	**2555.43**

Carrying Amounts	Freehold land	Buildings	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
Balance at March 31, 2017	**37.86**	**1194.74**	**2703.58**	**40.27**	**6.48**	**21.08**	**4004.01**
Additions	-	98.04	848.48	11.07	8.38	0.70	966.67
Depreciation expense	-	(62.68)	(621.15)	(10.51)	(1.72)	(8.96)	(705.02)
Disposals (net)	-	(3.05)	(6.32)	(0.01)	-	(0.32)	(9.70)
Balance at March 31, 2018	**37.86**	**1227.05**	**2924.59**	**40.82**	**13.14**	**12.50**	**4255.96**
Additions	-	59.96	324.82	5.01	15.52	-	405.31
Depreciation expense	-	(65.72)	(639.90)	(10.20)	(2.62)	(6.85)	(725.29)
Disposals (net)	-	-	(5.59)	(0.03)	(1.92)	(1.04)	(8.58)
Balance at March 31, 2019	**37.86**	**1221.29**	**2603.92**	**35.60**	**24.12**	**4.61**	**3927.40**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Capital work in progress movement	Total
Balance at March 31, 2017	**514.09**
Addition during the year	622.21
Capitalised during the year	(966.67)
Balance at March 31, 2018	**169.63**
Addition during the year	460.56
Capitalised during the year	(405.31)
Balance at March 31, 2019	**224.88**

(a) Includes ₹632.42 million (Previous year: ₹602.20 million) being cost of building on leasehold land

(b) Includes Research and Development capital expenditure of ₹38.27 million (Previous year: ₹26.54 million) - Refer Note: 40(b) on Research & Development expenditure.

(c) Assets pledged as security

Immovable properties of the Company carry pari-passu charge in favour of the consortium of bankers, as security for banking facilities availed.

The vehicles purchased through finance lease arrangement are hypothecated to the lessor.

(d) Capitalised borrowing cost

Borrowing costs capitalised on property, plant and equipment during the year - ₹ Nil (Previous year: ₹ Nil).

(e) Contractual obligations

Refer Note: 30B for disclosure of Contractual commitments for the acquisition of property, plant and equipment.

(f) Vehicles under finance lease

Refer Note: 42 for disclosure requirements relating to Vehicles under finance lease.

5. Intangible assets

Particulars	As at 31.03.2019	As at 31.03.2018
A. Carrying amounts		
Software	9.91	9.09
Technical know-how	15.62	39.36
Total	**25.53**	**48.45**
B. Intangible assets under development	**-**	**0.29**

Cost	Software	Technical know-how	Total
Balance at March 31, 2017	**21.45**	**124.14**	**145.59**
Additions - **(a)**	5.41	-	5.41
Balance at March 31, 2018	**26.86**	**124.14**	**151.00**
Additions - **(a)**	5.79	-	5.79
Balance at March 31, 2019	**32.65**	**124.14**	**156.79**

Accumulated amortisation and impairment	Software	Technical know-how	Total
Balance at March 31, 2017	**12.69**	**56.00**	**68.69**
Amortisation expense	5.08	28.78	33.86
Balance at March 31, 2018	**17.77**	**84.78**	**102.55**
Amortisation expense	4.97	23.74	28.71
Balance at March 31, 2019	**22.74**	**108.52**	**131.26**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Carrying amounts	Software	Technical know-how	Total
Balance at March 31, 2017	**8.76**	**68.14**	**76.90**
Additions	5.41	-	5.41
Amortisation expense	(5.08)	(28.78)	(33.86)
Balance at March 31, 2018	**9.09**	**39.36**	**48.45**
Additions	5.79	-	5.79
Amortisation expense	(4.97)	(23.74)	(28.71)
Balance at March 31, 2019	**9.91**	**15.62**	**25.53**

(a) Includes Research and Development capital expenditure of ₹NIL (Previous year: ₹0.02 million) - Refer Note: 40(b) on Research & Development expenditure.

6. Investments - Non Current

Particulars	Quantity in numbers		Nominal value (e)	Notes	Value	
	As at 31.03.2019	As at 31.03.2018			As at 31.03.2019	As at 31.03.2018
Non Current investments:						
(A) Investment in associate - Equity Shares (fully paid) Quoted (Trade): Instruments at cost						
Wendt (India) Ltd.	797352	797352	10		10.36	10.36
				6A	**10.36**	**10.36**
(B) Investments in joint ventures - Equity Shares (fully paid) Unquoted (Trade): Instruments at cost						
Murugappa Morgan Thermal Ceramics Ltd.	1430793	1430793	10		44.04	44.04
Ciria India Ltd.	59998	59998	10		1.68	1.68
				6B	**45.72**	**45.72**
(C) Investments in subsidiaries - Equity Shares (fully paid) Unquoted (Trade): Instruments at cost						
CUMI International Ltd., Cyprus	25737406	25737406	USD 1		2195.80	2195.80
Sterling Abrasives Ltd.	54000	54000	100		37.10	37.10
Southern Energy Development Corporation Ltd.	389908	389908	10		54.66	54.66
Net Access India Ltd.	5000000	5000000	10		50.00	50.00
CUMI (Australia) Pty Ltd., Australia	1050	1050	AUD 1		14.79	14.79
				6C	**2352.35**	**2352.35**
(D) Other Investments Instruments at Fair Value Through Other Comprehensive Income [FVTOCI]						
Investments in equity instruments - Equity Shares (fully paid)						
Quoted (Trade)						
Coromandel Engineering Co. Ltd.	3042900	3042900	10		87.04	144.85
Unquoted (Non - Trade)						
Murugappa Management Services Ltd.	44704	44704	100		11.30	11.30
				6D(i)	**98.34**	**156.15**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	Quantity in numbers		Nominal value (g)	Notes	Value	
	As at 31.03.2019	As at 31.03.2018			As at 31.03.2019	As at 31.03.2018
Instruments at Fair Value Through Profit or Loss [FVTPL]						
Quoted (Non-Trade) **Investments in equity instruments - Equity Shares (fully paid)**						
Grindwell Norton Ltd.	800	800	5		0.47	0.40
Orient Abrasives Ltd.	10,000	10,000	1		0.27	0.35
Orient Refractories Ltd.	10,000	10,000	1		2.39	1.59
EID Parry (India) Ltd.	1,000	1,000	1		0.20	0.28
Cholamandalam Investment and Finance Co Ltd.	100	100	10		0.14	0.15
TI Financial Holdings Ltd. **(a)**	1,000	1,000	1		0.49	0.65
Tube Investments of India Ltd. **(a)**	1,000	1,000	1		0.38	0.22
Coromandel International Ltd.	330	330	1		0.17	0.17
				6D(ii)	**4.51**	**3.81**
Unquoted (Non-Trade) **Investments in equity instruments - Equity Shares (fully paid)**						
Chennai Willingdon Corporate Foundation(₹50 only) **- (b)**	5	5	10		0.00	0.00
John Oakey Mohan Ltd.	1,900	1,900	10		0.05	0.05
CUMI Employees Co-operative Society/Stores	-	-	-		0.03	0.03
Kerala Enviro Infrastructure Ltd.	10,000	10,000	10		0.10	0.10
Other Investment						
7 Years National Savings Certificate of ₹2,000/- deposited with the Government	-	-	-		0.00	0.00
				6D(iii)	**0.18**	**0.18**
				6D	**103.03**	**160.14**
Investment - Non Current Grand Total [6A] + [6B] + [6C] + [6D]					**2511.46**	**2568.57**

Particulars		Value	
		As at 31.03.2019	As at 31.03.2018
(E) Other Investment - Current			
Instruments at Fair Value Through Profit or Loss [FVTPL] - Mutual Fund	**6E**	**935.65**	**544.79**

(a) During previous year, TI Financial Holdings Ltd. under a scheme of arrangement demerged into TI Financial Holdings Ltd. and Tube Investments of India Ltd. Consequently, the face value of equity share of TI Financial Holding Ltd. was changed from ₹2 per share to ₹1 per share.

(b) Shares allotted against corporate membership contribution.

(c)

Particulars	As at	
	31.03.2019	31.03.2018
Aggregate book value of quoted investments	1037.56	703.81
Aggregate market value of quoted investments	3389.15	2640.18
Aggregate carrying value of unquoted investments	2409.55	2409.55

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

(d)

Categorywise other investment as per Ind AS 109	As at	
	31.03.2019	31.03.2018
Mandatorily measured at FVTPL - 6D(ii)+6D(iii)+ 6E	940.34	548.78
Financial assets designated at FVTOCI (equity instruments) - 6D(i)	98.34	156.15
Investments at cost (includes investment in associate, joint ventures and subsidiaries) - 6A+6B+6C	2408.43	2408.43
	3447.11	**3113.36**

(e) Nominal value per share is given in Indian Rupees or in respective foreign currency where stated.

7. Other financial assets.

Particulars	As at	
	31.03.2019	31.03.2018
A. Non-current		
Security deposits	121.24	109.54
	121.24	**109.54**
B. Current		
Advances to employees	16.35	9.05
Other receivables:		
Considered good	37.66	37.90
Considered doubtful	0.61	1.11
Less: Allowance for doubtful receivables	(0.61)	(1.11)
	54.01	**46.95**

8. Other assets

Particulars	As at	
	31.03.2019	31.03.2018
A. Non-current		
Capital advances	100.33	26.67
Prepayments	76.67	77.54
Deposits paid under protest relating to Sales tax, Value Added Tax, Central excise and Service tax demands	15.33	16.38
Taxation (net of provisions)	13.31	43.65
	205.64	**164.24**
B. Current		
Prepayments	33.33	31.73
Trade advance to Suppliers	175.18	195.75
Balances with/amount receivable from Statutory Authorities	175.66	142.85
	384.17	**370.33**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

9. Inventories

Particulars	As at	
	31.03.2019	31.03.2018
Raw materials	1583.21	1049.94
Raw materials in transit	74.24	123.86
Work-in-progress	657.75	620.17
Stock-in-trade	125.57	122.05
Stock-in-trade in transit	-	25.51
Finished goods	691.47	441.63
Stores and spares	258.10	220.82
	3390.34	**2603.98**

a. The method of valuation of inventories are stated in Note: 3.16.

b. The cost of inventories recognised as an expense (consumption) during the year was ₹8608.67 million (previous year: ₹7606.90 million)

c. All the above inventories are expected to be recovered/utilised within twelve months.

10.Trade receivables (Unsecured)

Particulars	As at	
	31.03.2019	31.03.2018
Current		
a. Considered good	3305.07	3267.44
b. Which have significant increase in Credit Risk	73.85	70.96
c. Credit impaired	-	-
Allowance for doubtful receivables (expected credit loss allowance)	(73.85)	(70.96)
	3305.07	**3267.44**

a. Trade receivables are generally due between 30 to 60 days. The Company's term includes charging of interest for delayed payment beyond agreed credit days. However, the Company charges interest after considering the historical trend, business prospects, reason for delay, market conditions etc.

b. **Credit risk** is managed at the operational segment level. The credit limit and credit period are fixed for each customer after evaluating the financial position, past performance, business opportunities, credit references etc. The credit limit and the credit period are reviewed regularly at periodical intervals.

c. **Concentration risk** considers significant exposures relating to industry, counterparty, geography, currency etc. The concentration of credit risk is not significant as the customer base is large and diversified.

d. The Company has used a practical expedient by computing the expected credit loss allowance for trade receivables based on provision matrix which takes into account the historical credit loss experience adjusted for forward looking information.

e. Some trade receivable may be past due over 365 days without being impaired considering the certainty of realisation.

f. Trade Receivable includes dues from Related party amounting ₹399.43 million(Previous year: ₹386.03 million)

g. Movement in expected credit loss allowance:

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	70.96	50.35
Add: Allowance made during the year	29.98	30.32
Less: Reversal of allowance during the year	(27.09)	(9.71)
Balance at the end of the year	**73.85**	**70.96**

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

11A. Cash and cash equivalents

Particulars	As at	
	31.03.2019	31.03.2018
Balances with banks	152.43	191.50
Deposit account	3.43	3.23
Cash on hand	0.85	0.94
	156.71	**195.67**

Non-cash transactions:

During the year, the Company has not entered into any non-cash transactions on investing and financing activities.

11B. Bank balances other than above

Particulars	As at	
	31.03.2019	31.03.2018
Earmarked funds - Unclaimed and unpaid dividend - Refer Note: 18	15.70	12.76

12. Equity Share Capital

Particulars	As at	
	31.03.2019	31.03.2018
Authorised share capital:		
387,250,000 (as at March 31, 2018: 387,250,000) equity shares of ₹1 each	387.25	387.25
Issued, Subscribed and Paid-up		
189,154,175 (as at March 31, 2018: 188,955,751) equity shares of ₹1 each fully paid	**189.15**	**188.96**

a) Reconciliation of the shares outstanding at the beginning and at the end of the reporting period

Particulars	As at 31.03.2019		As at 31.03.2018	
Equity shares with voting rights	No. of Shares	Value of Shares	No. of Shares	Value of Shares
At the beginning of the year	188,955,751	188.96	188,658,090	188.66
Add: Shares issued against Employee Stock Option Scheme/Plan	198,424	0.19	297,661	0.30
At the end of the year	**189,154,175**	**189.15**	**188,955,751**	**188.96**

The Company had received share application money for 1500 shares under Employee Stock Option Scheme 200, which was pending for allotment as at 31st March 2018 and has been allotted during FY 2018-19. Details of receipt/adjustment is shown under "Other equity"- Refer Note no: 13C.

b) Terms/Rights attached to Equity Shares

The Company has only one class of Equity shares having a par value of ₹1/- per share. Each holder of equity shares is entitled to one vote per share. Repayment of capital and surplus, will be in proportion to the number of equity shares held.

c) Dividend details

An interim dividend of ₹1.5/- per share was declared at the meeting of the Board of Directors held on February 01, 2019 and the same has been paid (previous year an interim dividend of ₹1/- per share was declared at the meeting of the Board of Directors held on February 14, 2018 and the same has been paid).

Final dividend of ₹1.25/- per share is proposed for the year ended March 31, 2019 (previous year final dividend of ₹1.25/- was proposed and paid). The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, upon which the liability will be recorded in the books.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

d) Details of shares held by shareholders holding more than 5% of the aggregate shares in the Company

Name of the Shareholder	As at			
	31.03.2019		31.03.2018	
	No. of Shares held	% of holding	No. of Shares held	% of holding
Ambadi Investments Ltd.	56,054,244	29.63%	56,054,244	29.67%
HDFC Trustee Company Ltd.	16,987,297	8.98%	16,873,797	8.93%

Holdings combined based on the PAN of the shareholders

e) Stock Options granted under the Company's Employee Stock Option Scheme/Plan

Stock Options granted under the Company's Employee Stock Option Scheme/Plan pending exercise by option holders carry no right to dividend and voting rights. Further details of the Employee Stock Option Scheme/Plan are provided in Note: 36.

13. Other equity

Particulars	As at	
	31.03.2019	31.03.2018
A. Reserves and Surplus		
a. Profit on Forfeiture of shares/warrants	6.03	6.03
b. Capital redemption reserve	27.68	27.68
c. Securities premium	254.11	226.19
d. General reserve	7175.43	6675.43
e. Share options outstanding account	46.69	30.84
f. Retained earnings	5019.34	4433.18
B. Items of Other Comprehensive Income		
g. Reserve for equity instruments	26.61	84.42
h. Revaluation Surplus	23.74	23.74
C. Share application money pending allotment		
i. Share application money pending allotment	-	0.23
Total Other Equity	**12579.63**	**11507.74**

a. Profit on Forfeiture of shares/warrants

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	6.03	6.03
Movements	-	-
Balance at end of the year	**6.03**	**6.03**

During 1999, an amount of ₹6.03 million has been added on account of forfeiture of shares. This balance can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Company.

b. Capital redemption reserve

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	27.68	27.68
Movements	-	-
Balance at end of the year	**27.68**	**27.68**

During the year 2000-01, the Company bought back 2,768,000 shares at the then face value of ₹10 each at the price of ₹115 per share from the shareholders, pursuant to the offer of buy back of shares. A sum equal to nominal value of shares so bought back was transferred to capital redemption reserve account as per Companies Act, 1956. This reserve can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Company.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

c. Securities premium

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	226.19	194.15
Movements	27.92	32.04
Balance at end of the year	**254.11**	**226.19**

The Securities premium received during the year represents the premium received towards allotment of 198,424 shares. Cumulatively 2,446,175 equity shares were allotted during the period FY 2009-10 to FY 2018-19 under ESOP Scheme 2007 and ESOP Plan 2016 (Refer Note: 36 towards details of the Scheme/Plan).

This balance will be utilised in accordance with the provisions of Section 52 of the Companies Act, 2013 towards issuance of fully paid bonus shares, write-off of preliminary expenses, commission/discount expenses on issue of shares/debentures, premium payable on redemption of redeemable preference shares/debentures and buy back of its own shares/securities under Section 68 of the Companies Act.

d. General reserve

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	6675.43	6175.43
Transfer from retained earnings	500.00	500.00
Balance at end of the year	**7175.43**	**6675.43**

The general reserve is a free reserve, retained from Company's profits and can be utilized upon fulfilling certain conditions in accordance with the Companies Act.

e. Share options outstanding account

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	30.84	16.08
Movements	15.85	14.76
Balance at end of the year	**46.69**	**30.84**

Under Ind AS 102, fair value of the options granted is to be expensed out over the life of the vesting period as employee compensation costs reflecting period of receipt of service. Refer Note: 36 for details.

f. Retained earnings:

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	4433.18	3860.74
Add: Profits for the year	1660.89	1434.79
Add: Other Comprehensive Income arising from remeasurement of defined benefit obligation net of tax	24.77	3.32
Less: Transfer to General reserve	(500.00)	(500.00)
Less: Final dividend paid	(236.30)	(141.51)
Less: Dividend tax on Final dividend	(35.27)	(14.92)
Less: Interim dividend paid	(283.71)	(188.93)
Less: Dividend tax on interim dividend	(44.22)	(20.31)
Balance at end of the year	**5019.34**	**4433.18**

The amount that can be distributed by the Company as dividend to its equity shareholders is determined based on the financial position and dividend policy of the Company and in compliance with the requirements of the Companies Act, 2013.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

g. Reserve for equity instruments

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	84.42	57.79
Movements	(57.81)	26.63
Balance at end of the year	**26.61**	**84.42**

This reserve represents the cumulative gains and losses arising on the revaluation of equity instruments measured at fair value through Other Comprehensive Income (Refer Note: 6D(i)), which will be reclassified to retained earnings when those assets are disposed off.

h. Revaluation Surplus

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	23.74	23.74
Movements	-	-
Balance at end of the year	**23.74**	**23.74**

Land & Buildings added upto 31st August 1984 were revalued in 1984 based on the valuation done by an independent valuer. The value added on revaluation amounting to ₹58.41 million was credited to fixed asset revaluation reserve. The depreciation charged on the revalued portion was recouped every year from this reserve upto March 31, 2015 under previous GAAP.

i. Share application money pending allotment

Particulars	As at	
	31.03.2019	31.03.2018
Balance at the beginning of the year	0.23	-
Movements	(0.23)	0.23
Balance at end of the year	**-**	**0.23**

Share application money pending for allotment under ESOP scheme. This represents the amount to the extent not refundable.

14. Non - Current borrowings

Particulars			As at	
	Maturity date	Repayment terms	31.03.2019	31.03.2018
Secured				
Finance lease obligation (consisting of multiple contracts with varied maturities) - Refer **(a)**	Ranging from 2017 to 2022	Monthly instalments	8.96	18.09
Less: Current maturities of finance lease obligation (included in Note: 18)			6.27	7.31
Total Non - Current borrowings			**2.69**	**10.78**

a. Secured by the assets (vehicles) leased under the finance lease arrangement. The obligation consists of fixed rate of debt with repayment periods not exceeding 4 years (Refer Note: 42)

b. Disclosure related to "Changes in liabilities arising from financial liabilities" under Ind AS 7 Statement of Cash flow:

Net debts reconciliation	Note	As at 31.03.2019	As at 31.03.2018
Cash and Cash equivalents	11A	156.71	195.67
Other investments (liquid)	6E	935.65	544.79
Non Current borrowings (including current maturities)	14	(8.96)	(18.09)
Net Cash/(Net debt)		**1083.40**	**722.37**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	Other assets		Liabilities from Financing activities	Total
	Cash and Cash equivalents	Other investments (liquid)	Non Current borrowings (including current maturities)	
Net Cash/(Net debt) as at 31st March 2017	67.05	-	(25.98)	41.07
Changes from Financing Cash flows	128.62	544.79	7.89	681.30
Net Cash/(Net debt) as at 31st March 2018	**195.67**	**544.79**	**(18.09)**	**722.37**
Changes from Financing Cash flows	(38.96)	390.86	9.13	361.03
Net Cash/(Net debt) as at 31st March 2019	**156.71**	**935.65**	**(8.96)**	**1083.40**

15. Provisions

Particulars	As at	
	31.03.2019	31.03.2018
A. Non Current		
Employee benefits - Compensated absences	59.36	56.95
B. Current		
Employee benefits - Compensated absences	43.52	39.10

The movement represents the provision created for the year arising out of the actuarial valuation after considering the actual settlements made during the year.

16. Deferred tax liabilities (net)

Particulars	As at	
	31.03.2019	31.03.2018
Deferred tax liabilities (net)	212.01	260.79

Deferred tax liabilities are the amounts of income taxes payable in future periods in respect of taxable temporary differences.
Deferred tax assets are the amounts of income taxes recoverable in future periods in respect of: (a) deductible temporary differences; (b) the carry forward of unused tax losses; and (c) the carry forward of unused tax credits.

Particulars	2018-19			
	Balance as at 31.03.2018	Recognised in Profit & loss	Recognised in Other Comprehensive Income	Balance as at 31.03.2019
Breakup of deferred tax liabilities (net):				
Allowance for doubtful receivables and advances	(25.18)	(0.84)	-	(26.02)
Voluntary retirement scheme payments	(0.64)	(0.04)	-	(0.68)
Expenses allowed on payment basis	(49.12)	(2.24)	-	(51.36)
Principal portion of finance lease rentals	(1.96)	0.46	-	(1.50)
Accelerated depreciation for tax purposes	337.69	(46.12)	-	291.57
	260.79	**(48.78)**	-	**212.01**

Particulars	2017-18			
	Balance as at 31.03.2017	Recognised in Profit & loss	Recognised in Other Comprehensive Income	Balance as at 31.03.2018
Breakup of deferred tax liabilities (net):				
Allowance for doubtful receivables and advances	(17.74)	(7.44)	-	(25.18)
Voluntary retirement scheme payments	(0.43)	(0.21)	-	(0.64)
Expenses allowed on payment basis	(44.83)	(4.29)	-	(49.12)
Principal portion of finance lease rentals	(1.69)	(0.27)	-	(1.96)
Accelerated depreciation for tax purposes	405.34	(67.65)	-	337.69
	340.65	**(79.86)**	-	**260.79**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

17. Trade payables

Particulars	As at	
	31.03.2019	31.03.2018
Total outstandings due to micro and small enterprises - Refer Note: 32	17.83	15.46
Total outstanding dues of creditors other than micro enterprises and small enterprises	1452.10	1653.20
	1469.93	**1668.66**

a. Trade payables are non-interest bearing and are normally settled as per due dates generally ranging from 30 to 60 days.

b. The Company has financial risk management policies in place to ensure that all payables are paid within the agreed credit terms.

c. Dues to Micro and Small enterprises have been determined to the extent such parties have been identified on the basis of the information collected by the Management. This has been relied upon by the auditors.

18. Other financial liabilities

Particulars	As at	
	31.03.2019	31.03.2018
Secured		
Current Maturities of Finance lease obligation (Refer Note: 14)	6.27	7.31
Unsecured		
Unclaimed and Unpaid dividends **(a)**	15.70	12.76
Remuneration payable to directors	21.14	21.32
Deposits	45.63	41.75
Payable relating to Capital expenditure	73.58	57.38
Other payables	477.74	423.71
	640.06	**564.23**

(a) There is no amount which has fallen due as at Balance sheet date to be credited to Investor Education and Protection Fund. The unclaimed dividend portion is kept separately in earmarked bank accounts - Refer Note: 11B

19. Other current liabilities

Particulars	As at	
	31.03.2019	31.03.2018
Contract Liabilities **(a)**	43.99	-
Advance from Customers **(a(i))**	-	36.16
Statutory liabilities	17.46	25.23
	61.45	**61.39**

(a) Details about Contract Liaiblities:

i) In respect of the amount shown under "Advance from Customers" have not been reclassified to "Contract liabilities" as the Company has adopted Ind 115 "Revenue from Contract with Customers" effective from April 1, 2018 by using the modified retrospective method.

ii) The outstanding balances in Contract liabilities/Advance from Customers have increased from last year mainly on account of increase in receipt of advances during current year.

iii) Revenue recognized in relation to Contract liabilities/Advance from Customers:

The following summary shows how much of the revenue recognized in the current year relates to carried forward contract liabilities/Advance from customer and how much relates to performance obligations that were satisfied in the prior year.

Particulars	For the year
	2018-19
Revenue recognized that was included in the Contract liability/Advance from Customer balance at the beginning of the period	36.16
Revenue recognized from performance obligations satisfied in previous periods	-

iv) In respect of the remaining performance obligations, the disclosure towards allocation of transaction price do not arise as the contract has an original expected duration of one year or less.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

20. Revenue from operations

Particulars	For the year	
	2018-19	2017-18
a. Gross Sales / Income from Operations		
Sale of products (including Excise duty of ₹260.49 million for the year 2017-18) - Refer Note: 29 “Segment Disclosure” for breakup of sales	17013.74	15656.70
Sale of services	505.38	117.55
	17519.12	**15774.25**
b. Other operating income:		
Service income	73.57	69.28
Scrap Sales	64.10	57.08
Miscellaneous income		
- Export benefits	134.49	109.99
- Royalty income	3.87	4.06
- Others	27.05	8.16
	303.08	**248.57**
Total Revenue from operations (a + b)	**17822.20**	**16022.82**

i. Gross Sales/Income from operations reported above are exclusive of excise duty effective from July 01, 2017 due to implementation of Goods and Service Tax. The comparative figures excluding excise duty is summarised below:

Particulars	2018-19	2017-18
Gross Sales/Income from Operations (inclusive of excise duty)	17519.12	15774.25
Less: Excise duty on Sales	-	260.49
Gross Sales/Income from Operations (exclusive of excise duty)	**17519.12**	**15513.76**

ii. Impact on account of adoption of Ind AS 115 ”Revenue from contracts with customers”

The Company has adopted Ind AS 115 “Revenue from Contract with Customers” effective from April 1, 2018 by using the modified retrospective method. The Company has applied the revenue standard for all open contracts as at the date of initial application. The effect on adoption of Ind AS 115 is not material and hence no adjustments have been made to the opening balance of retained earnings.

For the periods ended upto March 31, 2018, the company had applied Ind AS 18 under which the revenue attributable to freight was recognised as revenue at the time of transfer of risk and rewards to the customer. Under the new standard Ind AS 115, the performance obligation relating to the freight has been identified as a separate performance obligation and is recognised as revenue at a point in time when the obligation is met and included as a part of “sale of services”.

Consequent to the adoption of Ind AS 115 “Revenue from contracts with customers”, revenue from sale of services increased by ₹444.18 million with a corresponding reduction in sale of products.

As permitted under the transitional provision in Ind AS 115, the relevant disclosures for the comparative period is not disclosed.

No element of financing is deemed present as the sales are made with a credit term which is one year or less.

Reconcilation of Revenue recognised with Contract price

Particulars	2018-19
Contract price	17792.88
Less: Discount - Variable Consideration	273.76
Gross Sales/Income from Operations	**17519.12**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

21. Other Income

Particulars	For the year	
	2018-19	2017-18
(a) Dividend Income		
Dividend Income from Non-Current Investments		
Dividend from Subsidiaries	133.27	157.35
Dividend from Joint Ventures	34.62	101.54
Dividend from Associate	23.92	19.93
Dividend from Others	0.04	0.03
Dividend Income from Current Investments	34.34	6.49
	226.19	**285.34**
(b) Interest Income earned on Financial assets that are not designated as Fair Value Through Profit or Loss [FVTPL]		
from bank deposits (at amortised cost)	3.27	0.64
from other financial assets carried (at amortised cost)	6.42	4.35
	9.69	**4.99**
(c) Net gain/(loss) arising on financial assets mandatorily measured at Fair Value Through Profit or Loss [FVTPL] - (Refer Note: 6D(ii) & 6D(iii))	**0.70**	**0.78**
(d) Other Non operating income		
Profit on sale of assets	7.02	4.48
Reversal of allowance for doubtful receivables and advances	16.50	10.41
Provision for expenses no longer required written back	7.82	2.94
Rental income	1.28	1.43
	32.62	**19.26**
Total Other Income (a + b + c + d)	**269.20**	**310.37**

22. Changes in inventories of finished goods, stock-in-trade and work in progress

Particulars	For the year	
	2018-19	2017-18
Opening stock		
Work-in-progress	620.17	601.45
Stock-in-trade (including in transit)	147.56	161.70
Finished goods	441.63	583.97
(A)	**1209.36**	**1347.12**
Less: Closing stock		
Work-in-progress	657.75	620.17
Stock-in-trade	125.57	147.56
Finished goods	691.47	441.63
(B)	**1474.79**	**1209.36**
Decretion/(Accretion) to stock (A) - (B)	**(265.43)**	**137.76**

23. Employee benefits expense

Particulars	For the year	
	2018-19	2017-18
Salaries, wages and bonus	1374.51	1299.29
Contribution to provident and other funds	147.40	141.84
Voluntary retirement compensation	0.87	1.35
Share based payments to employees (ESOPs) - Refer Note: 36	15.85	14.76
Welfare expenses	282.56	284.72
	1821.19	**1741.96**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

24. Finance costs

Particulars	For the year	
	2018-19	2017-18
Interest costs		
- on Fixed loans	-	1.14
- on Others	2.03	7.86
Other borrowing costs	7.35	5.67
	9.38	**14.67**

25. Depreciation and amortisation expense

Particulars	For the year	
	2018-19	2017-18
Depreciation of property, plant and equipment - Refer Note: 4A	725.29	705.02
Amortisation of intangible assets - Refer Note: 5A	28.71	33.86
	754.00	**738.88**

26. Other expenses

Particulars	For the year	
	2018-19	2017-18
Consumption of stores and spares **(a)**	777.80	682.89
Power and fuel **(b)**	1928.98	1623.69
Rent	62.12	50.10
Excise duty on stock differential **(c)**	-	(62.86)
Rates and taxes	37.53	51.35
Insurance	22.31	19.84
Repairs to: **(d)**		
- Buildings	21.52	21.60
- Machinery	522.86	474.68
Directors' Sitting fees (refer Corporate Governance report)	2.05	1.94
Commission to Non-wholetime Directors (refer Corporate Governance report)	15.25	15.60
Auditors' remuneration (Refer Note: 39)	6.57	6.30
Travel and conveyance	164.38	168.89
Freight, delivery and shipping charges	492.34	442.79
Impairment loss on financial assets	12.26	-
Less: Provision adjusted	(12.26)	-
Allowance for doubtful receivables and advances	31.14	31.21
Selling commission	34.78	41.88
Advertisement and publicity	30.98	37.97
Printing, stationery and communication	37.31	44.18
Loss on exchange fluctuation (net)	3.17	1.60
Professional fees	52.96	68.09
Services outsourced	1110.94	1009.26
Loss on sale of assets	3.12	7.65
Miscellaneous expenses	149.44	143.43
	5507.55	**4882.08**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

(a) Includes consumption of packing materials amounting ₹424.73 million (previous year ₹372.59 million);

(b) Net of own power generation, which includes energy banked with Kerala State Electricity Board - ₹NIL (Previous year NIL);

(c) Represents the excise duty differential on finished stocks;

(d) Repairs includes consumption of stores and spares amounting to ₹310.70 million (Previous year: ₹280.83 million).

27. Income tax expense

Particulars	For the year	
	2018-19	2017-18
A. Income tax expense recognised in Profit and loss:		
a. Current tax		
In respect of the current year	867.00	697.00
	867.00	**697.00**
b. Deferred tax		
In respect of the current year	(49.49)	(80.17)
Adjustment to deferred tax attributable to changes in tax rates and laws	0.71	0.31
	(48.78)	**(79.86)**
Total Income tax expense recognised during the year (net)	**818.22**	**617.14**

Income tax reconciliation

Profit before tax	**2479.11**	**2051.93**
Income tax expense calculated at the applicable tax rate of 34.944% on Profit before tax (for FY 2017-18: 34.608%)	866.30	710.13
Tax expenses recognised during the year	818.22	617.14
Differential tax impact	**(48.08)**	**(92.99)**
Differential tax impact due to the following (tax benefit)/tax expenses		
Exempted Dividend income - Net of disallowance	(48.26)	(71.74)
Dividend Income from Overseas Subsidiaries - Taxable at special rates	(9.64)	(8.62)
Expenditure on Corporate Social Responsibility not eligible for tax deduction	5.52	4.46
Claim of weighted benefit relating to In-house Research & Development facilities	(18.71)	(16.33)
Movement in the fair valuation of the quoted Investment	(0.24)	(0.28)
Donations not allowable	2.76	2.28
Depreciation and amortisation not allowable under Income tax provisions	9.82	(10.69)
Effect of changes in tax rate	0.71	0.31
Share based payments not eligible for tax deduction	5.56	5.36
Others	4.40	2.26
	(48.08)	**(92.99)**
B. Income tax expense recognised in Other Comprehensive Income:	**-**	**-**

28. Earnings per share

Particulars	For the year	
	2018-19	2017-18
Basic earnings per share (₹)	8.79	7.60
Diluted earnings per share (₹)	8.77	7.58
The calculation of Basic and Diluted Earnings per share is based on the following data:		
Profits for the year after tax	1660.89	1434.79
Weighted average number of equity shares outstanding during the year:		
- Basic	189,049,874	188,783,979
- Dilutive	189,477,299	189,356,441

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

The weighted average number of equity shares for the purpose of diluted earnings per share reconciles to the weighted average number of equity shares used in the calculation of basic earnings per share as given below:

Particulars	For the year	
	2018-19	2017-18
Weighted average number of equity shares used in the calculation of basic earnings per share	189,049,874	188,783,979
Shares deemed to be issued for no consideration in respect of:		
- Employee Stock Option Scheme/Plan	427,425	572,462
Weighted average number of equity shares used in the calculation of diluted earnings per share	189,477,299	189,356,441

29. Segment information

Carborundum Universal Limited provides solutions for following industrial manufacturing needs by developing, manufacturing and marketing products using the properties of materials known as electrominerals:

- Surface engineering (material removal, cutting, polishing) known as Abrasives. This segment comprise of Bonded, Coated, Processed cloth, Polymers, Power tools and Coolants.
- Technical ceramics and super refractory solutions to address wear protection, corrosion resistance, electrical resistance, heat protection and ballistic protection known as Ceramics.
- Electrominerals for surface engineering, refractories, energy and environment. It includes fused alumina, silicon carbide, zirconia, specialty minerals and captive power generation from hydel power plant.

The Business Group Management Committee headed by Managing director (CODM) consisting of Chief Financial Officer, Leaders of Strategic Business Units and Human resources have identified the above three reportable business segments. It reviews and monitors the operating results of the business segments for the purpose of making decisions about resource allocation and performance assessment using profit or loss and return on capital employed.

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	Abrasives		Ceramics		Electrominerals		Eliminations		Total	
	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Sales										
External Sales - Gross	8902.80	8628.49	4793.69	3911.32	3317.25	3116.89	-	-	17013.74	15656.70
Sale of services	296.32	-	177.30	117.55	31.76	-	-	-	505.38	117.55
Inter segment sales	9.92	7.43	13.90	27.16	1185.36	989.91	(1209.18)	(1024.50)	-	-
Gross Sales / Income from Operations	**9209.04**	**8635.92**	**4984.89**	**4056.03**	**4534.37**	**4106.80**	**(1209.18)**	**(1024.50)**	**17519.12**	**15774.25**
Results										
Segment result - EBITDA	1528.95	1467.10	1101.51	801.80	673.20	551.75	-	-	3303.66	2820.65
Depreciation/amortisation	(230.29)	(240.37)	(283.60)	(256.79)	(227.97)	(227.24)	-	-	(741.86)	(724.40)
Profit on sale of Fixed Assets (Net)	(1.34)	(1.57)	(0.48)	(3.38)	(0.89)	0.68	-	-	(2.71)	(4.27)
Unallocated corporate expenses/ (Income)									(307.18)	(316.49)
Interest expense									(9.38)	(14.67)
Interest and dividend income									235.88	290.33
Fair valuation of Investment									0.70	0.78
Profit before tax	**1297.32**	**1225.16**	**817.43**	**541.63**	**444.34**	**325.19**	**-**	**-**	**2479.11**	**2051.93**
Income taxes									(818.22)	(617.14)
Net profit after taxes									**1660.89**	**1434.79**
Other information:										
Segment assets	4547.73	4431.68	3620.61	3433.11	3400.52	3063.48	-	-	11568.86	10928.27
Unallocated corporate assets									3688.94	3430.33
Total assets	**4547.73**	**4431.68**	**3620.61**	**3433.11**	**3400.52**	**3063.48**	-	-	**15257.80**	**14358.60**
Segment liabilities	1106.47	1078.07	471.12	449.30	507.23	667.01	-	-	2084.82	2194.38
Unallocated corporate liabilities									404.20	467.52
Total liabilities	**1106.47**	**1078.07**	**471.12**	**449.30**	**507.23**	**667.01**	-	-	**2489.02**	**2661.90**
Addition to Non - Current assets	222.22	234.11	187.22	193.81	124.84	128.06				
Depreciation & Amortization	230.29	240.37	283.60	256.79	227.97	227.24				
Impairment losses	9.08	19.70	20.43	7.88	1.64	3.63				

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Particulars	Abrasives	Ceramics	Electro minerals	Eliminations	Total
			2018-19		
Revenue recognised under Ind AS 115					
- At the point in time	9209.04	4923.69	4534.37	(1209.18)	17457.92
- Over the period	-	61.20	-		61.20
Gross Sales / Income from Operations	**9209.04**	**4984.89**	**4534.37**	**(1209.18)**	**17519.12**

Sales between operating segments are carried out at arm's length basis and are eliminated at entity level consolidation.

The accounting policies of the reportable segments are the same as that of Company's accounting policies described in Note: 3.22; Segment profit represents the profit before tax earned by each segment without allocation of central administration costs and directors' salaries, other income, as well as finance costs. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance.

Segment assets and liabilities:

For the purposes of monitoring segment performance and allocating resources between segments:

1. All assets other than investments, loans, current and deferred tax assets, unallocable current and non-current assets, are allocated to reportable segments.
2. All liabilities other than borrowings, current and deferred tax liabilities and unallocable current and non-current liabilities, are allocated to reportable segments.

Geographical information:

The Company is domiciled in India. The amount of its revenue from external customers is broken down by location of the customers and information about its non-current assets other than financial instruments, deferred tax assets, post employment benefit asset and right arising from insurance contracts by location are detailed below:

Particulars	Sales from external customers		Non-current assets	
	For the year		As at	
	2018-19	2017-18	31.03.2019	31.03.2018
India	13656.77	12200.72	4383.45	4638.57
Rest of the world	3862.35	3573.53	-	-
	17519.12	15774.25	4383.45	4638.57

Information about major customers:

No single customer contributed 10% or more to the Company's revenue during the years 2018-19 and 2017-18.

Gross Sales/Income from operations reported above are exclusive of excise duty effective from July 01, 2017 due to implementation of Goods and Service Tax. The comparative figures excluding excise duty is summarised below:

Particulars	Abrasives		Ceramics		Electrominerals		Eliminations		Total	
	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Gross Sales/Income from Operations (inclusive of excise duty)	9209.04	8635.92	4984.89	4056.03	4534.37	4106.80	(1209.18)	(1024.50)	17519.12	15774.25
Less: Excise duty on Sales	-	(165.59)	-	(42.70)	-	(52.20)	-	-	-	(260.49)
Gross Sales/Income from Operations (exclusive of excise duty)	9209.04	8470.33	4984.89	4013.33	4534.37	4054.60	(1209.18)	(1024.50)	17519.12	15513.76

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

30. Contingent Liabilities and commitments:

Particulars	As at 31.03.2019	As at 31.03.2018
A. Contingent Liabilities		
a. No provision is considered necessary for disputed income tax, sales tax, service tax, excise duty and customs duty demand which are under various stages of appeal proceedings as given below:		
i. Income Tax Act, 1961	323.20	223.53
ii. Central Sales Tax Act,1956 & Local Sales Tax laws of various states	8.67	19.80
iii. Central Excise Act,1944	4.44	12.20
iv. Service Tax	1.00	1.00
b. Outstanding guarantees given on behalf of subsidiaries	1784.98	1726.64
c. Outstanding letters of credit	436.59	217.63
d. Claims against the Company not acknowledged as debts		
i. Electricity tax	3.92	3.92
ii. Stamp duty	1.90	1.90
iii. Claim filed by ship liner towards damages	14.00	14.00
iv. Claim filed before Consumer Dispute Redressal Forum / Civil Court	0.61	0.61
v. Additional Electricity Deposit Demand - Tamil Nadu Electricity Board	3.00	3.00
vi. Demand charges - TANGEDCO	1.39	1.39
vii.Contribution to District Mineral Foundation under Mines and Minerals (Development and Regulation), Act	22.76	22.76
	47.58	**47.58**
e. Employees demands pending before Labour Courts - quantum not ascertainable at present		
In respect of the above demands disputed by the Company, appeals filed are pending before respective appellate authorities. Outflows, if any, arising out of these claims would depend on the outcome of the decision of the appellate authorities and the Company's rights for future appeals. No reimbursements are expected.		
B. Commitments:		
Estimated amount of contracts remaining to be executed (net of advances):		
- Towards capital account	367.41	123.38

31. The following pre-commissioning expenses incurred during the year on various projects have been included in Fixed Assets/Capital Work in Progress:

Particulars	For the year	
	2018-19	2017-18
Account Head:		
Cost of materials consumed	-	3.23
Consumption of Stores and Spares	-	0.45
Salary, Wages and Bonus	5.65	7.43
Power and Fuel	-	16.77
Rent	0.02	0.24
Travel and Conveyance	0.00	0.34
Freight, Delivery and Shipping charges	0.00	0.42
Rates and Taxes	0.80	1.05
Professional Fees	1.11	0.49
Miscellaneous Expenses	0.19	1.18
	7.77	**31.60**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

32. Disclosures required under Section 22 of the Micro, Small and Medium Enterprises Development Act, 2006

Particulars	As at 31.03.2019	As at 31.03.2018
Principal amount remaining unpaid to suppliers (Refer Note: 17) Dues to Micro and Small Enterprises have been determined to the extent such parties have been identified on the basis of information collected by the Management. This has been relied upon by the auditors. There were no overdue amounts/interest payable to Micro and Small Enterprises as per Micro, Small and Medium Enterprises Development Act, 2006 as at the Balance Sheet date or any time during the year.	17.83	15.46

33. Employee Benefits

a. Defined contribution plans:

The Company operates defined contribution retirement benefit plans for all qualifying employees. The assets of the plans are held separately from those of the Company in funds under the control of trustees. When employees leave the plans prior to full vesting of the contributions, the contributions payable by the Company are reduced by the amount of forfeited contributions.

Particulars	2018-19	2017-18
Contribution to Provident fund and Other funds recognised in Profit and Loss for the year	123.08	116.44
Amounts outstanding as at the end of the respective year and paid subsequently	14.82	13.65

b. Defined benefit plans:

The Company sponsors funded defined benefit plans for employees. Under the plans, the employees are entitled to post-retirement benefits by way of gratuity amounting to 57.69% of last drawn salary for each year of completed service until the retirement age of 58. The defined benefit plans are administered by separate funds, independent of the Company.

These plans typically expose the Company to actuarial risks such as: Investment, Interest rate, longevity and salary risk:

i) **Investment risk:** The present value of the defined benefit obligation is calculated using a discount rate which is determined by reference to market yields at the end of the reporting period on government bonds.

ii) **Interest risk:** A decrease in the bond interest rate will increase the plan liability; however, this will be partially offset by an increase in the return on the plan's debt investments.

iii) **Longevity risk:** The present value of the defined benefit obligation is calculated by reference to the best estimate of the mortality of plan participants during their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.

iv) **Salary escalation risk:** The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

The actuarial valuation of the plan assets and the present value of the defined benefit obligation were carried out as at March 31, 2019 by a certified actuary of the Institute of Actuaries of India. The present value of the defined benefit obligation, and the related current service cost and past service cost, were measured using the projected unit credit method.

No other post-retirement benefits are provided to the employees. In respect of the contribution made to provident funds, the employer guarantees the interest notified by the appropriate authority and to the extent of interest rate guaranteed, the liability is considered as defined benefit. For the financial year ended March 31, 2019, the interest yield is adequate to meet the guaranteed interest.

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Assumptions:

The principal assumptions used for the purposes of the actuarial valuations are given below:

Particulars	As at 31.03.2019	As at 31.03.2018
Discount rate	7.79%	8.00%
Expected rate of return	8.00%	8.00%
Expected salary increment	5%	5%
Attrition rate	2%	2%
Mortality table used	Indian Assured Lives Mortality (2012-14) Ultimate	Indian Assured Lives Mortality (2006-08) Ultimate

A. Gratuity

The details of actuarial valuation in respect of Gratuity liability are given below:

Particulars	As at 31.03.2019	As at 31.03.2018
i. Projected benefit obligation as at beginning of the year	284.62	271.30
Service cost	23.13	23.44
Interest cost	21.50	18.71
Remeasurement (gain)/ loss:		
Actuarial (gain)/loss arising from experience adjustments	(8.20)	(2.48)
Benefits paid	(31.62)	(26.35)
Projected benefit obligation as at end of the year	**289.43**	**284.62**
ii. Fair value of plan assets as at beginning of the year	238.46	224.88
Expected return on plan assets	20.31	16.79
Contributions	25.40	22.30
Benefits paid	(31.62)	(26.35)
Remeasurement gain/ (loss):		
Actuarial Gain /(losses) on plan assets	16.57	0.84
Fair value of plan assets as at end of the year	**269.12**	**238.46**
iii. Amount recognised in the balance sheet:		
Projected benefit obligation as at end of the year	289.43	284.62
Fair value of the plan assets at the end of the year	269.12	238.46
(Liability) / Asset recognised in the Balance sheet - net	**(20.31)**	**(46.16)**
iv. Cost of the defined benefit plan for the year:		
Current service cost	23.13	23.44
Interest on obligation	21.50	18.71
Expected return on plan assets	(20.31)	(16.79)
Components of defined benefit cost recognised in the Statement of Profit and Loss	**24.32**	**25.36**
(included in Note: 23 Contribution to Provident and other funds)		
Remeasurement on the net defined benefit liability:		
Actuarial (gain)/loss arising from changes in demographic assumptions	(8.20)	(2.48)
Actuarial (gain)/loss arising from changes in financial assumptions	(16.57)	(0.84)
Components of defined benefit costs recognised in Other Comprehensive Income	**(24.77)**	**(3.32)**
Total cost of the defined benefit plan for the year	**(0.45)**	**22.04**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

v	Experience Adjustment	31.03.2019	31.03.2018
	Present value of defined benefit obligation	289.43	284.62
	Fair value of plan assets	269.12	238.46
	Balance sheet (Liability)/Asset	(20.31)	(46.16)
	P & L (Income)/expenses	24.32	25.36
	Experience adjustment on plan liabilities (gain)/loss	(8.20)	(2.48)
	Experience adjustment on plan assets (gain)/loss	(16.57)	(0.84)

In the absence of the relevant information from the actuary, the above details do not include the composition of plan assets and expected return on each category of plan assets.

The actual return on plan assets was ₹20.30 million (for the year ended March 31, 2018: ₹16.79 million).

Sensitivity analysis in respect of the actuarial assumptions used in calculation of defined benefit obligation are given below:

Particulars	As at	
	31.03.2019	31.03.2018
Discount rate - 100 basis point higher	(268.57)	(265.76)
Discount rate - 100 basis point lower	313.32	305.99
Salary escalation rate - 100 basis point higher	310.03	304.31
Salary escalation rate - 100 basis point lower	(270.97)	(266.87)
Life expectancy rate - 100 basis point higher	298.25	289.21
Life expectancy rate - 100 basis point lower	(279.34)	(279.52)

In the above table, positive figures indicate increase in the liability and negative figures indicate decrease in the liability.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

The weighted average duration of the benefit obligation as at March 31, 2019 is 15 years (as at March 31, 2018: 15 years).

The Company expects to make a contribution of ₹20.29 million (as at March 31, 2018: ₹46.14 million) to the defined benefit plans during the next financial year.

B. Provident fund

The actuary has assessed the calculations of the Interest Rate Guarantees based on the guidance note issued by the Institute of Actuaries of India. The disclosures required under Ind AS 19 is as set out below:

Fund and plan asset position are as follows:

Particulars	As at	
	31.03.2019	31.03.2018
Plan asset at the end of the year	1095.25	1027.54
Present value of benefit obligation at the end of the year	770.54	986.00
Surplus available	324.71	41.54
Asset recognised in the Balance Sheet	Not applicable since a separate trust is maintained	

The plan assets are primarily invested in Government securities.

Assumptions for present value of interest rate guarantee are as follows:

Particulars	As at	
	31.03.2019	31.03.2018
Discount rate	7.79%	8.00%
Remaining term to maturity of portfolio (years)	6.21 years	4.76 years
Expected guaranteed rate(%)	8.65%	8.55%
Attrition rate	2%	2%

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

34. Financial Instruments

(i) Capital management

For the purpose of the Company's capital management, capital includes issued equity capital, securities premium and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximise the shareholder value.

The Company's objective when managing capital are to:

- safeguard their ability to continue as a going concern, so that they can continue to provide return for shareholders and benefits for other stakeholders and
- Maintain an optimal capital structure to reduce the weighted average cost of capital.

In order to maintain or adjust the capital structure, the Company may adjust the amount of dividend paid to shareholders, return capital to shareholders, issue new shares or sell non-core assets to reduce the debt.

Debt to Equity ratio

Particulars	As at	
	31.03.2019	31.03.2018
Debt	8.96	18.09
Equity	12768.78	11696.70
Debt to Equity ratio	0.07%	0.15%

Loan covenants:

No covenants are applicable as of March 31, 2019, since the loans outstanding were only under finance lease.

(i) Categories of financial instruments

Particulars	As at	
	31.03.2019	31.03.2018
A. Financial assets		
Measured at Fair Value Through Profit or Loss (FVTPL) - Mandatorily measured:		
- Equity and other investments	940.34	548.78
Measured at Amortised cost		
- Cash and bank balances	172.41	208.43
- Other financial assets	3480.32	3423.93
Measured at Fair Value Through Other Comprehensive Income (FVTOCI)		
- Investments in equity instruments designated upon initial recognition	98.34	156.15
Measured at cost		
- Investments in Equity instruments in Subsidiaries, Joint Ventures and Associate	2408.43	2408.43
B. Financial liabilities		
Measured at amortised cost (including trade payable balances)	2112.68	2243.67

(iii) Financial risk management objectives

The Company's activities expose it to market risk, liquidity risk and credit risk. The table given below explains the sources of risk which the entity is exposed to and how the entity manages the risk.

Risk	Exposure arising from	Measurement	Management
a. Credit risk	Cash and cash equivalents, trade receivables, derivative financial instruments, financial assets measured at amortised cost	Ageing analysis Credit ratings Financial analysis	Diversification of Short term investments, review of credit limits and credit locks and secured mode of payment
b. Market risk: i. Market risk - Foreign exchange	Future commercial transactions Recognised financial assets and liabilities not denominated in Indian rupee (INR)	Cash flow forecasting Sensitivity analysis	Foreign exchange forward contracts
ii. Market risk - Interest rate	Long-term borrowings at variable rates	Sensitivity analysis	Market trends, Interest rate swaps
iii. Market risk - Price risk	Investment in securities	Sensitivity analysis	Portfolio diversification
c. Liquidity risk	Borrowings and other liabilities	Rolling cash flow forecasts	Availability of sanctioned credit lines and borrowing facilities

The Company's risk management is governed by its policies. The Company's treasury identifies, evaluates and hedges financial risks in close coordination with the Company's operating units. The risk management policy of the Company provides written principles for overall risk management covering areas such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments and investment of excess liquidity.

a. Credit risk:

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

a. (i) Trade receivables

Customer credit risk is managed by each business unit under the guidance of the credit policy, procedures and control relating to customer credit risk management. Credit quality of a customer is assessed based on financial position, past performance, business/economic conditions, market reputation, expected business etc. Based on this evaluation, credit limit and credit terms are decided. Exposure on customer receivables are regularly monitored and managed through credit lock and release. For export customers, credit insurance is generally taken.

The impairment is based on expected credit loss model considering the historical data and financial position of individual customer at each reporting period. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 10. The Company does not hold any collateral as security.

The Company has low concentration of risk with respect to trade receivables, as its customers are widely spread and belong to diversified industries and operate in largely independent markets.

a. (ii) Financial Instruments and cash deposits

Credit risk from balances with banks and financial institutions is managed by the Company's treasury department in accordance with the Company's policy. Investments of surplus funds are made for short-term in liquid funds of rated mutual funds and deposits with banks. The Investment limits are set out per Mutual fund and the value of total fixed deposit in Banks to minimise the concentration risk. Investments are reviewed by the Board of Directors on a quarterly basis.

The Company has no exposure to credit risk relating to these cash deposits as at: March 31, 2019 and March 31, 2018. The Corporate guarantees given by the Company to bankers on behalf of its subsidiaries are duly approved by the Board of Directors and are reviewed on a quarterly basis. The total exposure to corporate guarantees is limited to figures reported in Note: 30A

b. Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risks: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk. Financial instruments affected by market risk include loans and borrowings, deposits, Investments (FVTOCI) and derivative financial instruments.

Market risk exposures are measured using sensitivity analysis. There has been no change in the measurement and management of the Company's exposure to market risks.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

b. (i) Foreign currency risk management

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. Foreign exchange rate exposures are managed within policy parameters approved by Board of Directors. The Company manages its foreign currency risk by hedging transactions that are expected to occur within a maximum of 12 month period of forecasted receipts and payments. When a derivative is entered into for the purpose of hedging, the Company negotiates the terms of those derivatives to match with the terms of the hedged exposure. The Company hedges around 50% of the net material exposure by currency. Exposures relating to capital expenditure beyond a threshold are hedged as per Company policy at the time of commitment.

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities based on gross exposure at the end of the reporting period is as under:

Currency	Liabilities as at		Assets as at	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
US Dollar (USD)	114.32	194.13	675.38	674.87
Euro (EUR)	31.86	194.06	228.10	300.16
Great British Pound (GBP)	-	0.07	0.46	1.34
Australian Dollar (AUD)	3.01	-	-	-
Swedish Krona (SEK)	-	2.88	-	-

Quantum of Forward contract (derivatives) (all of which identified as hedges) outstanding as at the end of the year (notional principal amount) on:

Contracts booked for	Currency	As at 31.03.2019		As at 31.03.2018	
		Number of contracts	Value	Number of contracts	Value
Import payment	USD	3	7.68	-	-

Foreign currency sensitivity analysis

The Company is mainly exposed to US Dollar. The following table provides the sensitivity impact to a 10% strengthening or weakening of Indian rupee exchange rate against foreign currencies. The sensitivity analysis is done on net exposures. A positive number below indicates an increase in profit or equity when the Rupee weakens against the foreign currency and when net exposure is an asset.

Currency impact in (₹ million) relating to the foreign currencies of:	As at 31.03.2019		As at 31.03.2018	
	Profit or loss	Equity	Profit or loss	Equity
US Dollar (USD)	37.00	37.00	31.44	31.44
EURO (EUR)	12.77	12.77	6.94	6.94
Great Britain Pound (GBP)	0.03	0.03	0.08	0.08
Australian Dollar (AUD)	(0.20)	(0.20)	-	-
Swedish Krona (SEK)	-	-	(0.19)	(0.19)
Total	**49.60**	**49.60**	**38.27**	**38.27**

The Company's sensitivity impact to foreign currency has increased during the current year end mainly due to the increase in quantum of exposure in USD and Euro as at the end of the reporting period.

b (ii) Interest rate risk management

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Company has been availing the borrowings on a fixed and variable rate of interest. These borrowings are carried at amortised cost. The borrowings on a fixed rate of interest basis are not subject to the interest rate risk as defined in Ind AS 107, since neither the carrying amount nor future cash flows will fluctuate because of change in market interest rates. The borrowings on a variable rate of interest are subject to interest rate risk as defined in Ind AS 107. The Company at the end of March 2019, does not carry any loans with variable interest.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

Classification of borrowings by nature of interest rate	As at	
	31.03.2019	31.03.2018
Borrowings at variable interest rate		
- Non - Current	-	-
- Current	-	-
Borrowings at fixed interest rate		
- Non - Current	2.69	10.78
- Current	6.27	7.31
Total Borrowings	**8.96**	**18.09**

Since there are no non-current borrowings on variable interest rate as on 31st March 2019 & 2018, interest rate exposure is nil.

b (iii) Price risks

The Company is exposed to equity price risks arising from equity investments. Certain of the Company's equity investments are held for strategic rather than trading purposes. The Company also holds certain other equity investments for trading purposes.

Equity price sensitivity analysis

The accumulated fair value change recognised on equity investment which are held for strategic purpose and designated at Fair value through Other Comprehensive Income as at 31st March 2019 is ₹26.61 million (31st March 2018: ₹84.42 million) - Refer Note no: 13. The sensitivity analysis below have been determined based on the exposure to equity price risks at the end of the reporting periods. If equity prices moves-up or decrease by 5%, the impact to Other Comprehensive Income and equity is given below:

Movement of equity price	Impact to Other Comprehensive Income /Equity	
	As at March 31, 2019	As at March 31, 2018
Increase by 5%	4.35	7.24
Decrease by 5%	(4.35)	(7.24)

The impact of change in equity price on non-current investment recorded at Fair value through Profit and Loss and other investment designated as Fair value Through Other Comprehensive Income is not significant.

c. Liquidity risk management

The Company's treasury under the guidance of Board of Directors have established an appropriate liquidity risk management framework. The Company manages liquidity risk through cash generation from business and have adequate banking facilities. The Company continuously forecasts and monitors actual cash flows and matches the maturity profiles of financial assets and liabilities.

Contractual maturities of financial liabilities

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31st March 2019:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
Non-current financial liabilities						
Finance lease liability*	2.69		2.83			2.83
Current financial liabilities						
Trade payables	1469.93	1469.93				1469.93
Finance lease liability	6.27	7.19				7.19
Other financial liabilities	633.79	633.79				633.79

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31st March 2018:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
Non-current financial liabilities						
Finance lease liability*	10.78		8.39	3.18		11.57
Current financial liabilities						
Trade payables	1668.66	1668.66				1668.66
Finance lease liability	7.31	10.45				10.45
Other financial liabilities	556.92	556.92				556.92

*Amount included in the above maturity analysis assumes interest outflows based on the actual interest rates.

Contractual Maturities of Financial Assets

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31st March 2019:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
Non-current financial assets						
Other financial assets	121.24		52.79		68.45	121.24
Current financial assets						
Trade receivables	3305.07	3305.07				3305.07
Advance to employees	16.35	16.35				16.35
Other financial assets	37.66	37.66				37.66

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31st March 2018:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
Non-current financial assets						
Other financial assets	109.54		42.32		67.22	109.54
Current financial assets						
Trade receivables	3267.44	3267.44				3267.44
Advance to employees	9.05	9.05				9.05
Other financial assets	37.90	37.90				37.90

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

The note below sets out details of additional undrawn facilities that the Company has at its disposal to further reduce liquidity risk.

Financing facilities

Particulars	As at	
	31.03.2019	31.03.2018
Unsecured cash credit and other borrowings facility:		
Amount used	-	-
Amount unused	845.00	845.00
	845.00	**845.00**
Secured cash credit and other borrowings facility:		
Amount used	-	-
Amount unused	1450.00	1450.00
	1450.00	**1450.00**
Total facilities		
Amount used	-	-
Amount unused	2295.00	2295.00
	2295.00	**2295.00**

Borrowing facilities - both funded and non-funded are secured by a pari-passu first charge on the current assets of the Company - both present and future; and a pari-passu second charge on immovable properties - both present and future.

Fair value measurements

This note provides information about how the Company determines fair value of various financial assets and financial liabilities.

Fair value of the Company's financial assets and financial liabilities that are measured at fair value on a recurring basis.

Some of the Company's financial assets and financial liabilities are measured at fair value at the end of the reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation techniques and inputs used):

Financial assets/financial liabilities	Fair Value as at		Fair value hierarchy	Valuation techniques & key inputs used
	31.03.2019	31.03.2018		
Investments in quoted equity instruments at FVTOCI	87.04	144.85	Level 1	Quoted bid price in an active market **(a)**
Investments in quoted instruments at FVTPL	940.16	548.60	Level 1	Quoted bid price in an active market
Investments in unquoted instruments at FVTPL	0.18	0.18	Level 3	Fair valuation **(b)**
Investments in unquoted instruments at OCI	11.30	11.30	Level 3	Fair valuation **(b)**

There were no changes in the fair value hierarchy levels in the above periods.

a) These investments in equity instruments are not for trading. Instead, they are held for medium or long term strategic purpose. Upon the application of Ind AS 109, the Company has chosen to designate these investments in equity instruments as at FVTOCI as the Directors believe that this provides a more meaningful presentation for medium or long term strategic investments, than reflecting changes in fair value immediately in profit or loss.

b) These investments in equity are not significant in value and hence additional disclosures are not presented.

Fair value of financial assets and financial liabilities that are not measured at fair value (but fair value disclosures are required)

Particulars	Fair value hierarchy	As at 31.03.2019		As at 31.03.2018	
		Carrying amount	Fair value	Carrying amount	Fair value
Financial assets held at amortised cost:					
Non-current financial assets					
- Other financial assets - Security deposit	Level 3	121.24	116.33	109.54	105.61
Current financial assets					
- Trade receivables	Level 2	3305.07	3305.07	3267.44	3267.44
- Advances to employees	Level 3	16.35	16.35	9.05	9.05
- Other advances	Level 3	37.66	37.66	37.90	37.90
Financial liabilities held at amortised cost:					
Non-current financial liabilities					
- Finance lease and interest thereon	Level 2	2.69	2.69	10.78	10.78
Current financial liabilities					
- Trade payables	Level 2	1469.93	1469.93	1668.66	1668.66
- Finance lease and interest thereon	Level 2	6.27	6.27	7.31	7.31
- Other financial liabilities	Level 3	633.79	633.79	556.92	556.92

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

The fair values of the financial assets and financial liabilities included above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant inputs being the discount rate that reflects the credit risk of counterparties.

Financial instruments by Category

Particulars	As at 31.03.2019			As at 31.03.2018		
	FVTPL	FVTOCI	Amortised Cost	FVTPL	FVTOCI	Amortised Cost
Financial Assets						
Non-Current						
Investments	4.69	98.34		3.99	156.15	
Other financial assets			121.24			109.54
Current						
Other Investment	935.65			544.79		
Trade receivables			3305.07			3267.44
Cash and Cash equivalent			156.71			195.67
Bank balances other than above			15.70			12.76
Other financial assets			54.01			46.95
	940.34	**98.34**	**3652.73**	**548.78**	**156.15**	**3632.36**
Financial Liabilities						
Non Current						
Borrowings			2.69			10.78
Current						
Trade payables			1469.93			1668.66
Other financial liabilities			640.06			564.23
	-	-	**2112.68**	-	-	**2243.67**

Non-Current Investment amounting ₹2408.43 million (for 31.03.2019 & 31.03.2018) has been valued at Cost.

35. Related Party Disclosures

List of Related Parties

Related party relationships are as identified by the management and relied upon by the auditors.

I) Parties where control exists - Subsidiaries

Direct Holding:

Net Access India Ltd.	[Net access]
Southern Energy Development Corporation Ltd.	[SEDCO]
Sterling Abrasives Ltd.	[Sterling]
CUMI (Australia) Pty Ltd.	[CAPL]
CUMI International Ltd.	[CIL]
Holding through Subsidiary:	
Volzhsky Abrasives Works	[VAW]
Foskor Zirconia (Pty) Ltd.	[Foskor]
CUMI America Inc.	[CAI]
CUMI Middle East FZE	[CME]
CUMI Abrasives & Ceramics Company Ltd.	[CACCL]
Thukela Refractories Isithebe Pty Ltd.	[TRIL]
CUMI Europe s.r.o	[CE]

II) Other related parties with whom transactions have taken place during the year.

Joint Ventures

Murugappa Morgan Thermal Ceramics Ltd.	[MMTCL]
Ciria India Ltd.	[Ciria]
Associate and its subsidiaries	
Wendt (India) Ltd.	[Wendt]
Subsidiaries of Associate:	
Wendt Grinding Technologies Ltd., Thailand	[WGTL]
Wendt (Middle East) FZE	[WME]
Key Management Personnel	
Mr. K Srinivasan, Managing Director	
Other Related parties	
Ambadi Investments Ltd. (Shareholder with significant influence and promoter holding more than 10%)	[AIL]
Parry Enterprises India Ltd. (Subsidiary of AIL)	[PEIL]
Parry Agro Industries Ltd. (Subsidiary of AIL)	[PAL]
Carborundum Universal Employees Provident fund	[CUEPF]
Retiral funds of Subsidiaries, Joint ventures, Associate and Other Related parties	

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

A. Transactions during FY 2018-19

Related Party	Income from Sales & Services	Royalty income/ Rental income	Dividend income	Purchase of goods	Purchase of power	Expenditure on other services	Rental Expenses	Managerial remuneration	Commission paid	Purchases of Fixed asset	Contribution to Provident Fund
Subsidiaries											
CAI	415.66	-	-	-	-	-	-	-	-	-	-
Net Access	1.46	0.48	15.00	-	-	24.48	-	-	-	-	-
Sterling	180.66	-	16.20	1.23	-	-	-	-	-	-	-
SEDCO	2.40	-	46.79	-	143.12	-	-	-	-	-	-
CAPL	398.15	3.87	55.28	-	-	-	-	-	-	-	-
CME	41.29	-	-	-	-	-	-	-	0.57	-	-
Foskor	8.47	-	-	55.97	-	-	-	-	-	-	-
CACCL	39.15	-	-	20.87	-	-	-	-	-	-	-
VAW	39.16	-	-	534.24	-	-	-	-	-	-	-
Total	**1126.40**	**4.35**	**133.27**	**612.31**	**143.12**	**24.48**	**-**	**-**	**0.57**	**-**	**-**
Joint Ventures											
MMTCL	19.91	-	28.62	7.30	-	-	-	-	-	1.20	-
Ciria	46.78	-	6.00	0.79	-	-	-	-	-		-
Total	**66.69**	**-**	**34.62**	**8.09**	**-**	**-**	**-**	**-**	**-**	**1.20**	**-**
Associate & its subsidiaries											
Wendt	28.36	-	23.92	23.03	-	-	1.62	-	-	7.86	-
WGTL	71.98	-	-	6.35	-	-		-	-		-
Total	**100.34**	**-**	**23.92**	**29.38**	**-**	**-**	**1.62**	-	-	**7.86**	-
Other related parties											
PEIL	-	-	-	-	-	24.79	-	-	-	-	-
CUEPF	-	-	-	-	-	-	-	-	-	-	124.45
Total	-	-	-	-	-	**24.79**	-	-	-	-	**124.45**
KMP	-	-	-	-	-	-	-	**23.24**	-	-	-
Grand Total	**1293.43**	**4.35**	**191.81**	**649.78**	**143.12**	**49.27**	**1.62**	**23.24**	**0.57**	**9.06**	**124.45**

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

B. Transactions during FY 2017-18

Related Party	Income from Sales & Services	Royalty income	Dividend income	Purchase of goods	Purchase of power	Expenditure on other services	Rental Expenses	Managerial remuneration	Commission paid	Purchases of Fixed asset	Contribution to Provident Fund
Subsidiaries											
CAI	296.21	-	-	0.15	-	-	-	-	-	-	-
Net Access	1.46	-	20.00	-	-	26.44	-	-	-	-	-
Sterling	135.32	-	13.50	2.06	-	-	-	-	-	-	-
SEDCO	2.40	-	74.08	-	185.26	-	-	-	-	-	-
CAPL	348.83	4.05	49.77	-	-	-	-	-	-	-	-
CME	113.02	-	-	-	-	-	-	-	-	-	-
Foskor	10.58	-	-	29.72	-	-	-	-	-	-	-
CACCL	61.38	-	-	73.89	-	-	-	-	-	-	-
VAW	50.16	-	-	507.47	-	-	-	-	-	-	-
CUMI Europe	-	-	-	-	-	-	-	-	7.01	-	-
Total	**1019.36**	**4.05**	**157.35**	**613.29**	**185.26**	**26.44**	**-**	**-**	**7.01**	**-**	**-**
Joint Ventures											
MMTCL	25.54	-	71.54	8.22	-	-	-	-	-	0.14	-
Ciria	108.38	-	30.00	1.97	-	-	-	-	-	-	-
Total	**133.92**	**-**	**101.54**	**10.19**	**-**	**-**	**-**	**-**	**-**	**0.14**	**-**
Associate & its subsidiaries											
Wendt	28.61	-	19.93	20.36	-	0.91	1.73	-	-	2.28	-
WGTL	56.41	-	-	4.71	-	-	-	-	-	-	-
WME	2.05	-	-		-	-	-	-	-	-	-
Total	**87.07**	**-**	**19.93**	**25.07**	**-**	**0.91**	**1.73**	-	-	**2.28**	**-**
Other related parties											
PEIL	-	-	-	-	-	34.40	-	-	-	-	-
CUEPF	-	-	-	-	-		-	-	-	-	116.80
Total	-	-	-	-	-	**34.40**	-	-	-	-	**116.80**
KMP	-	-	-	-	-	-	-	**22.46**	-	-	-
Grand Total	**1240.35**	**4.05**	**278.82**	**648.55**	**185.26**	**61.75**	**1.73**	**22.46**	**7.01**	**2.42**	**116.80**

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

C. Outstandings

Related Party	As at 31.03.2019				As at 31.03.2018			
	Trade and other receivable	Deposit outstanding	Payables	Letter of comfort / Guarantee outstanding*	Trade and other receivable	Deposit outstanding	Payables	Letter of comfort/ Guarantee outstanding*
Subsidiaries								
CAI	170.42	-		342.40	165.83	-	0.23	321.95
Net Access	0.72	-	4.70	-	0.29	-	3.91	-
Sterling	18.84	-	0.35	-	16.33	-	0.16	-
SEDCO	0.24	-	13.16	-	0.25	-	15.67	-
CAPL	43.28	-	-	-	20.06	-	-	-
CME	45.97	-	-	-	52.59	-	-	-
Foskor	8.29	-	-	239.00	-	-	-	273.00
CIL	-	-	-	1203.58	-	-	-	1131.69
CACCL	49.98	-	-	-	41.29	-	6.12	-
VAW	1.22	-	57.51	-	3.27	-	147.71	-
Total	**338.96**	**-**	**75.72**	**1784.98**	**299.91**	**-**	**173.80**	**1726.64**
Joint Ventures								
MMTCL	11.14	-	1.65	-	17.23	-	0.38	-
Ciria	11.60	-	-	-	32.12	-	0.22	-
Total	**22.74**	**-**	**1.65**	**-**	**49.35**	**-**	**0.60**	**-**
Associate & its subsidiaries								
Wendt	31.69	1.00	5.33	-	26.66	1.00	1.92	-
WGTL	7.08	-	-	-	9.21	-	1.17	-
WME	-	-	-	-	1.05	-	-	-
Total	**38.77**	**1.00**	**5.33**	**-**	**36.92**	**1.00**	**3.09**	**-**
Other related parties								
PEIL	-	-	3.12	-	-	-	1.61	-
CUEPF	-	-	10.75	-	-	-	9.88	-
Total	**-**	**-**	**13.87**	**-**	**-**	**-**	**11.49**	**-**
Grand Total	**400.47**	**1.00**	**96.57**	**1784.98**	**386.18**	**1.00**	**188.98**	**1726.64**

Transactions with related parties in the nature of sale of goods, rendering of services, purchase of goods, procurement of services are at arm's length price.

* Issued towards availment of banking facilities by the respective entities.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

D. Compensation to Key Management Personnel

The remuneration to Key Management Personnel for the years is given below:

Particulars	Year ended	
	31.03.2019	31.03.2018
Short term benefits	20.02	19.39
Post employment benefits	3.17	3.04
Other benefits	0.05	0.03
	23.24	**22.46**

The remuneration to Key Management Personnel is determined by the Nomination and Remuneration Committee having regard to the performance of individual and market trends.

36. Employee Stock Option Scheme/Plan [ESOP]

A. ESOP Scheme 2007

a. Pursuant to the approval accorded by shareholders at their Annual General Meeting held on 27th July 2007, the Nomination and Remuneration Committee of the Company formulated 'Carborundum Universal Limited Employee Stock Option Scheme 2007' (ESOP Scheme 2007).

b. Under the Scheme, options not exceeding 4,667,700 were reserved to be issued to the eligible employees, with each option conferring a right upon the employee to apply for one equity share. The options granted under the Scheme would vest as per the following schedule (except Grant V B):

   20% on expiry of one year from the date of grant;

   20% on expiry of two years from the date of grant;

   30% on expiry of three years from the date of grant; and

   30% on expiry of four years from the date of grant.

   The options granted to the employees would be capable of being exercised within a period of three years from the date of the first vesting and six years from the date of the second, third and fourth vesting.

   In respect of Grant V B, 40 per cent of the options would vest on expiry of one year from the date of grant and 30 per cent each on expiry of 2 and 3 years from the date of grant. The options granted to the employees (Grant V B) can be exercised within a period of three years from the date of the vesting in respect of 50% of the first tranche and six years for the balance 50% of the first tranche and the subsequent tranches from the respective date of vesting.

c. The exercise price of the option is equal to the latest available closing market price of the shares on the stock exchange where there is highest trading volume as on the date prior to the date of the Nomination and Remuneration Committee resolution approving the grant.

d. The vesting of options is linked to continued association with the Company and the employee achieving performance rating parameters.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

The details of the grants under the aforesaid scheme are as follows:

	Grant	I	II	III	IV	V A	V B	VI	VII	VIII
	Date of Grant	29.09.2007	28.01.2008	30.04.2008	24.07.2008	27.01.2011	27.01.2011	30.04.2011	05.08.2011	04.02.2012
	Exercise Price [₹]	91.80	75.23	59.03	61.40	125.08	125.08	124.15	146.00	155.00
	Vesting commences on	29.09.2008	28.01.2009	30.04.2009	24.07.2009	27.01.2012	27.01.2012	30.04.2012	05.08.2012	04.02.2013
(i)	Options granted	2,671,400	60,000	24,800	139,600	653,200	334,400	73,600	420,000	151,600
(ii)	Options outstanding as on 01.04.2018	-	-	-	2,052	275,456	111,416	-	190,080	76,812
(iii)	Options granted during the year	-	-	-	-	-	-	-	-	-
(iv)	Options cancelled during the year	-	-	-	-	-	-	-	-	-
(v)	Total options vested during the year	-	-	-	-	-	-	-	-	-
(vi)	Options exercised during the year	-	-	-	2,052	110,964	52,630	-	-	8,816
(vii)	Options lapsed during the year	-	-	-	-	-	-	-	-	-
(viii)	Options outstanding as on 31.03.2019	-	-	-	-	164,492	58,786	-	190,080	67,996
(viii) = (ii) + (iii) - (iv) - (vi) - (vii)										
The Options under Grant II and III are fully cancelled and hence there is no outstanding as of March 31, 2019.										
(ix)	Options vested but not exercised as at 01.04.2018	-	-	-	2,052	275,456	111,416	-	190,080	76,812
(x)	Options vested but not exercised as at 31.03.2019 (x) = (ix) + (v) - (vi) - (vii)	-	-	-	-	164,492	58,786	-	190,080	67,996

e. Contractual Life

The ESOP Scheme 2007, was instituted with the approval of the shareholders on 27th July 2007 and the first grant was made on 29th September 2007.

No further grants is proposed to be made under the ESOP Scheme 2007. However, options granted under the same which are pending to be exercised will continue to be administered by the Company.

f. The fair value of options based on the valuation of the independent valuer as of the respective dates of grant / modification are given below:

Grant	Fair value as per Black Scholes options pricing formula [₹]	Incremental Fair Value due to the modification of Exercise Period	Exercise Price [₹]
I	33.56	6.09	91.80
II	27.76	-	75.23
III	22.78	-	59.03
IV	24.61	3.00	61.40
VA	49.59	10.20	125.08
VB	44.27	11.75	125.08
VI	45.80	10.09	124.15
VII	54.13	11.07	146.00
VIII	55.62	9.86	155.00

g. Fair value has been calculated using the Black Scholes Options Pricing Formula and the significant assumptions in this regard are as follows: (weighted average basis)

	Grant			
	I & IV	II & III	V A & V B	VI, VII & VIII
Risk free Interest rate	7.38%	-	8.04%	8.35%
Expected Life (years)	2.5 to 7.0	-	2.5 to 7.0	2.5 to 7.0
Expected volatility	39.93	-	39.81	37.69
Expected dividend yield	2.32%	-	1.29%	1.60%

36B. ESOP Plan 2016

A Summary of Status of ESOPs Granted

The position of the existing scheme is summarized as under:

S. No.	Particulars	ESOP 2016
I. Details of the ESOP Plan 2016		
1.	Date of Shareholder's Approval	9th January 2017
2.	Total Number of Options approved	3,772,000
3.	Vesting Requirements	The vesting of Options granted, is based on annual performance rating for each financial year and as per following schedule: Grant I, Grant II B, Grant III and Grant IV: 20 per cent each on expiry of 1 and 2 years from the date of grant and 30 per cent each on expiry of 3 and 4 years from the date of grant. Grant IIA: 25 per cent on expiry of 1 year from the date of grant and 37.5 per cent each on expiry of 2 and 3 years from the date of grant.
4.	The Pricing Formula	The Options carry a right to subscribe to equity shares at the latest available closing price on the stock exchange which reports the highest trading volume, prior to the date of grant of the Options.
5.	Maximum term of Options granted (years)	The Exercise period would commence from the date of vesting and will expire on completion of 5 (five) years from the date of respective vesting.
6.	Method of Settlement	Equity
7.	Source of shares	Primary
8.	Variation in terms of ESOP	No variations

II. Options Movement during the year ended 31st March 2019

S. No.	Particulars	No. of Options	Weighted average exercise price	Grant I	Grant IIA	Grant IIB	Grant III	Grant IV
	Exercise Price per Option (in ₹)			**257.55**	**367.20**	**367.20**	**369.85**	**361.90**
1	No. of Options Outstanding at the beginning of the year	604,540	270.29	534,326	19,344	50,870	-	-
2	Options Granted during the year	156,750	367.27	-	-	-	105,880	50,870
3	Options cancelled during the year	55,152	257.55	55,152	-	-	-	-
4	Options Forfeited / Surrendered during the year	-	-	-	-	-	-	-
5	Options Lapsed during the year	-	-	-	-	-	-	-
6	Options Exercised during the year	23,962	257.55	23,962	-	-	-	-
7	Total number of shares arising as a result of exercise of Options	23,962	-	23,962	-	-	-	-
8	Money realised by exercise of Options (₹ in million)	6.17	NA	6.17	-	-	-	-
9	Number of Options outstanding at the end of the year	682,176	294.05	455,212	19,344	50,870	105,880	50,870
10	Number of Options exercisable at the end of the year	184,886	266.45	169,876	4,836	10,174	-	-

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

III. Weighted Average remaining contractual life as on 31st March 2019

Range of Exercise Price	No. of Options outstanding	Weighted average contractual life (years)
0 to 200	Nil	NA
201 to 300	455,212	5.61
301 to 400	226,964	6.91

IV. Exercise price equals market price weighted average Fair Value of Options granted during the year ended 31st March 2019 whose:

Exercise price equals market price	126.08
V. The weighted average market price of Options exercised during the year ended 31st March 2019	365.56

VI. Method and Assumptions used to estimate the fair value of Options granted during the year ended 31st March 2019:

The fair value has been calculated using the Black Scholes Option Pricing model.

The Assumptions used in the model are as follows:

Variables	Weighted Average
1. Risk Free Interest Rate (%)	7.72
2. Expected Life (in years)	4.07
3. Expected Volatility (%)	29.43
4. Dividend Yield (%)	0.53
5. Exercise Price	367.27
6. Price of the underlying share in market at the time of the option grant (₹)	367.27

Assumptions:

Stock Price: Closing price on National Stock Exchange of India Ltd. as on the date prior to the date of the Nomination and Remuneration Committee approving the grant has been considered.

Volatility: The expected price volatility is based on the historic volatility, adjusted for any expected changes to future volatility due to public available information.

Risk-free rate of return: The risk-free interest rate being considered for the calculation is the interest rate applicable for a maturity equal to the expected life of the options based on the zero-coupon yield curve for Government Securities.

Exercise Price: Exercise Price of each specific grant has been considered.

Time to Maturity: Time to Maturity / Expected Life of options is the period for which the Company expects the options to be live.

Expected divided yield: Expected dividend yield has been calculated as an average of dividend yields for five financial years preceding the date of the grant.

VII. Effect of share-based payment transactions on the entity's Profit or Loss for the period:

Particulars	Amount
Employee Option plan expense	₹15.85 million

Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

37. a. Value of Imports on CIF basis

Particulars	For the year	
	2018-19	2017-18
Raw materials	3003.59	2759.17
Components & Spare parts	159.04	77.87
Finished goods	622.15	522.42
Capital goods	600.89	140.61

37. b. Expenditure in foreign currency (on cash basis)

Particulars	For the year	
	2018-19	2017-18
Professional / Consultancy fees	24.12	11.18
Commission	3.17	12.75
Travel and other matters	39.94	43.19

38. Earnings in foreign exchange on account of

Particulars	For the year	
	2018-19	2017-18
Value of exports on FOB basis	3801.63	3497.63
Royalty	3.87	4.05
Dividend	55.28	49.77
Management fees	20.56	19.44

39. Auditors' Remuneration

Particulars	For the year	
	2018-19	2017-18
Statutory audit	3.20	3.20
Tax Audit	0.80	0.80
Other services	2.35	2.28
Out of pocket expenses	0.22	0.02
	6.57	**6.30**

40. Research and Development expenditure

Particulars	For the year	
	2018-19	2017-18
a) Revenue Expenditure (disclosed under the respective heads)		
Direct Material, Supplies and Consumables	34.17	36.64
Employee Benefit Expenses	60.69	55.80
Repair & Maintenance	5.08	3.04
Other Expenses	26.10	24.35
Depreciation	17.61	11.93
Total	**143.65**	**131.76**
b) Capital Expenditure		
Property, plant and equipment		
Buildings	0.66	2.30
Plant & Machinery	34.26	24.21
Furniture & Fixtures	3.36	0.03
	38.28	**26.54**
Intangibles	-	0.02
Total	**38.28**	**26.56**
Capital Work-in-Progress (CWIP)	17.47	-
Total Capital Expenditure (including CWIP)	**55.75**	**26.56**

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

41. Details on list of Investments in Subsidiaries, Joint Ventures and Associate as per Ind AS 27

Particulars	Principal place of business and Incorporation	Proportion of ownership interest	
		31.03.2019	31.03.2018
A. Investment in Subsidiaries			
CUMI International Ltd., Cyprus	Cyprus	100%	100%
Sterling Abrasives Ltd.	India	60%	60%
Southern Energy Development Corporation Ltd.	India	84.76%	84.76%
Net Access India Ltd.	India	100%	100%
CUMI (Australia) Pty Ltd., Australia	Australia	51.22%	51.22%
B. Investment in Joint Ventures			
Murugappa Morgan Thermal Ceramics Ltd.	India	49.00%	49.00%
Ciria India Ltd.	India	30%	30%
C. Investment in Associate			
Wendt (India) Ltd.	India	39.87%	39.87%

42. Leases

Particulars	As at	
	31.03.2019	31.03.2018
The Company has acquired vehicles under finance lease with respective asset as security:		
a. Original cost of Leased Assets	21.99	34.98
Cost as per Fixed Assets Schedule - Refer Note: 4A	21.99	33.64
b. Net carrying amount - Refer Note: 4A	4.61	12.50
c. Reconciliation between total minimum lease payments and their present value:		
Total minimum lease payments	10.02	22.02
Less: Future liability on interest account	1.06	3.93
Present value of lease payments - Refer Note: 14	8.96	18.09
d. Yearwise future minimum lease rental payments:		

Particulars	Total Minimum Lease Payments as on 31.03.2019	Present value of Lease payments as on 31.03.2019	Total Minimum Lease Payments as on 31.03.2018	Present value of Lease payments as on 31.03.2018
(i) Not later than one year	7.19	6.27	10.45	7.31
(ii) Later than one year and not later than three years	2.83	2.69	8.39	7.81
(iii) Later than three years and not later than five years	-	-	3.18	2.97
(iv) Later than five years	-	-	-	-
Total	**10.02**	**8.96**	**22.02**	**18.09**

e. The Company has taken certain premises under operating leases cancellable at mutual option. Hence no disclosure in this regard is required.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

43. Dividend Tax on the Interim Dividend has been paid after availing the credit amounting to ₹14.09 million (Previous year: ₹18.15 million) in respect of the tax paid on the dividends received from three domestic subsidiaries. Dividend tax payable on the proposed final dividend is eligible for set-off of dividend tax credit amounting to ₹19.32 million (Previous year - ₹13.22 million) in respect of dividend tax payable on dividends to be distributed by three domestic subsidiaries and an overseas subsidiary based on provision under sub section (1A) of Section 115O of the Income Tax Act.

44. Corporate Social Responsibility (Refer Corporate Social Responsibility Report)

During the year, the Company incurred an aggregate amount of ₹31.46 million (Previous year: ₹25.61 million) towards corporate social responsibility against the amount of ₹31.46 million (Previous year: ₹25.31 million) to be spent as per provision of Section 135 of the Companies Act, 2013 read with relevant schedule and rules made thereunder.

The details of the CSR spend is given below:	For the year	
	2018-19	2017-18
A. Expenditure incurred directly by the Company		
Skill Centre Development - Revenue expenditure	15.73	12.95
B. Expenditure incurred through Agencies		
AMM Foundation	11.10	12.66
Shri A.M.M Murugappa Chettiar Research Centre	4.63	-
Total	**31.46**	**25.61**

45. Events after the reporting period

No significant event is to be reported between the closing date and that of the meeting of Board of Directors.

46. Applicability of New/amendment to existing Indian Accounting Standards (Ind AS)

New standard and amendments to existing standard has been published and is mandatory for the Company' accounting periods beginning after April 1, 2019 or later periods but have not been earlier adopted by the Company.

(a) New standard issued

Title of the new Ind AS	Ind AS 116: Leases
The nature of the impending change or changes in accounting policy	Ind AS 116 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. Currently, operating lease expenses are charged to the statement of profit and loss. The Standard also contains enhanced disclosure requirements for lessees. In respect of the accounting requirements from the point of view of the lessor, Ind AS 116 substantially conforms to Ind AS 17.
The date by which application of Ind AS is required	Effective from April 1, 2019
The date as at which it plans to apply Ind AS initially	This will be implemented from the effective date of April 1, 2019, as applicable
Impact to the Company	No Material impact foreseen. Appropriate disclosures would be complied with.

For the year ended March 31, 2019 (in Indian Rupees million, unless otherwise stated)

(b) Amendments to existing Ind AS

Amendment to existing Ind AS that are not yet effective are not expected to have a material impact on the Company in the future reporting periods.

Title of amendment to existing Ind AS	The nature of the impending change or changes in accounting policy
Appendix C, 'Uncertainty over Income Tax Treatments', to Ind AS 12, 'Income Taxes'	This appendix explains how to recognise and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment.
Prepayment Features with Negative Compensation - Amendments to Ind AS 109, 'Financial Instruments'	Amendments to Ind AS 109 enable companies to measure at amortised cost some prepayable financial assets with negative compensation.
Plan Amendment, Curtailment or Settlement - Amendments to Ind AS 19, 'Employee Benefits'	The net defined benefit liability is remeasured to determine past service cost, or the gain or loss on curtailment or settlement, current service cost and net interest for the remainder of the period are remeasured using the same assumptions and the same fair value of plan assets.
Ind AS 12, 'Income Taxes'	The amendments clarify that the income tax consequences of dividends on financial instruments classified as equity should be recognised according to where the past transactions or events that generated distributable profits were recognised.
Ind AS 23, 'Borrowing Cost'	Paragraph 14 of Ind AS 23 required an entity to exclude borrowings made specifically for the purpose of obtaining a qualifying asset. The amendments clarify that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use or sale, it becomes part of general borrowings.

47. Rounding off

All amounts disclosed in the financial statements and notes have been rounded off to the nearest millions as per the requirement of Schedule III, unless otherwise stated.

48. Approval of financial statements

The financial statements were reviewed and recommended by the Audit Committee and has been approved by the Board of Directors at their meeting held on April 26, 2019.

Glossary

A	**Performance Ratios**	
	EBITDA/Net Sales %	EBITDA = PBT + Interest + Depreciation - Exceptional items Net Sales = Gross Sales - Excise duty on Sales
	PBIT/Net Sales %	PBT + Interest - Exceptional items
	Asset Turnover times (excluding Investments)	Net sales/ Average of Total assets excluding Investments
	Return on Capital Employed %	PBIT/Average Capital Employed
	Return on Equity	PAT/Average of Shareholder's Funds
B	**Leverage Ratios**	
	Interest Cover times	EBITDA/Interest cost
	Debt Equity Ratio	Total Debt/Shareholders Funds
	Debt/Total Assets	Total Debt/Total Assets
C	**Liquidity Ratio**	
	Current Ratio	Current Assets/Current Liabilities
D	**Activity Ratio ***	
	Inventory Turnover days	Average Inventory / (Turnover/365)
	Receivable Turnover days	Average Receivables / (Turnover/365)
	Creditors No of days	Average Trade Creditors / (Turnover/365)
	Cash Cycle days	Inventory Turnover + Receivables Turnover - Creditors No of days
	* - based on Turnover and average of opening/closing parameters	
E	**Investor related Ratios**	
	Price to Earnings Ratio	Average share of monthly high low/EPS
	Enterprise Value/EBITDA	Total Enterprise Value^/EBITDA
	Enterprise Value/Net Sales	Total Enterprise Value^/Net Sales
	^ Enterprise Value	Market Capitalisation + Loan funds + Non controlling interest - Cash & Cash equivalents

Concept & Design :
HASTRA
hastra.hastra@gmail.com

CARBORUNDUM UNIVERSAL LIMITED
CIN : L29224TN1954PLC00318
PARRY HOUSE, 43, MOORE STREET, CHENNAI- 600 001
TEL: 91 44 30006161 FAX: 91 44 30006149
EMAIL: investorservices@cumi.murugappa.com WEB: www.cumi-murugappa.com