ANNUAL PERFORMANCE REVIEW – STEEL BILLETS

2023-2024

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1. BACKGROUND

a) Brief about the commodity such as sample picture, lifecycle and various varieties/grade of the commodity found in India

India is the world's 2nd largest producer of Steel in the world, steel a highly durable and storable commodity is conducive for storage that creates opportunity for cash and carry making it suitable for trading. Steel a highly durable and storable commodity is conducive for storage that creates opportunity for cash and carry making it suitable for trading. Globally and in India, Steel is consumed and produced through-out the year Steel is used/consumed across the country in Construction, automotive, energy, packaging transports, appliance industries etc. hence a widespread demand across the country.

Major steel producing states include Punjab, Chhattisgarh, Jharkhand, Karnataka, West Bengal, Uttar Pradesh, Odisha, and Gujarat

Source: India Mineral Yearbook

Steel Billets

Steel billet is a product of melting iron ore or scrap iron. It is generally known as a second stage product of steel production. Steel Billets are produced in two ways namely continuous casting or rolled directly from the casting process by billet mills. Steel billets soft and ductile and are produced in square cross-sections. They can be formed into a wide array of shapes, particularly square, rectangular and circular. They are not in usable form until they have been formed into various shapes and sizes, they are most often used for the production of steel rods and bars, wire and hollow sections and plates. They mostly used for the production of steel rods and bars, wire and hollow sections and plates.

Standards for billets vary, and each must feature the chemical composition necessary for producing the desired product.

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Steel - Value Chain

Standardization

Percentage of standard and certified steel produced by integrated steel plants varies from 80-90%. In secondary steel sector this percentage is low.

In India, Bureau of Indian Standards (BIS) is the National Standards Body, who are engaged in formulation and implementation of National Standards knows as Indian Standards. Adoption of Indian Standards or marking products to bear ISI Mark by its very nature is optional unless it is made mandatory under specific Law, Rules & Regulations. Section 16 of BIS Act, 2016 authorizes Union Government to make the use of ISI marks mandatory in the public interest.

Government has been pursuing imposition of steel quality control order for ensuring the availability of quality steel to the industry, users and public at large. During 2012-2018, Government notified 53 carbon steel, alloy steel and stainless-steel products to make available quality steel for the sectors mainly in construction, infrastructure, automobile, and engineering applications. Vide Gazette Notification dated 12th March 2012, Ministry of Steel had notified two Quality Control orders namely: Steel and Steel Products (Quality Control) Order, 2012 and Steel and Steel Products (Quality Control) Second Order, 2012. In the first order 7 Standards and in the second order 9 products (one product later withdrawn) were notified and now these products require mandatory Certification. Later, 18th December 2015, Ministry of Steel notified 15 more products vide order namely Steel and Steel Products (Quality Control) Order, 2015. This covers the major flat and long products to ensure safety & security of infrastructure & engineering products made of steel. Further, Government issued another quality control order namely Stainless-Steel Products (Quality Control) Order, 2016, dated 10th June 2016 covering thereby 3 categories of stainless-steel products covered under 3 Indian Standards.

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Later, Ministry of Steel merged all the previous steel quality control orders and added 15 new standards into a single order notified on 13th August 2018, namely, Steel and Steel Products (Quality Control) Order, 2018 covering thereby 53 steel products.

b) Commodity fundamentals and balance sheet as per the following format (to be prepared based on publicly available information on best effort basis

Global Steel Scenario		
In Million tonnes	2022	2023
Opening Stocks		
Production	1,890	1,892
Imports		
Exports	378	402
Consumption	1,783	1,763
Closing Stocks		
Source: World Steel Association ***Crude Steel Numbers are considered for production*** ***Finished Steel number are provided for Exports Consumption***		

India Steel Scenario		
In Million tonnes	2021-22	2022-23
Production	113.63	121.29
Import	4.67	6.02
Total Supply	118.30	127.31
Exports	13.49	6.72
Domestic Consumption	105.41	119.17
Source: JPC ***Finished Steel Numbers are considered***		

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Top 10 Major producing countries

Top 10 Major Producing Countries (in Million Tonnes)		
Country	2022	2023
China	1,019.10	1,019.10
India	140.80	125.40
Japan	87.00	89.20
United States	81.40	80.50
Russia	76.00	71.70
South Korea	66.70	65.80
Germany	35.40	36.90
Türkiye	33.70	35.10
Brazil	31.80	34.10
Iran	31.00	30.60
Source: World Steel Association ***Crude Steel Numbers are provided***		

Top 10 Major consuming countries

Top 10 Major Consuming Countries (in Million Tonnes)		
Country	2022	2023
China	926.7	895.7
North America	137.1	136.3
India	116.1	133.4
European Union (27)	142.6	127.6
United States	94.5	90.5
Russia & other CIS + Ukraine	51.6	56.1
South Korea	51.3	54.7
Japan	55	53.3
Russia	41.7	44.6
Türkiye	32.5	38.1
Source: World Steel Association ***Finished Steel Numbers are provided***		

Top 10 Major Exporting countries

Top 10 Exporters of Steel (Million Tonnes)	
Country	2023
China	94.3
Japan	32.2
South Korea	27
European Union (27)	26
Germany 2	22.5
Italy 2	16.1
Belgium 2	14.6
Russia	13.9
Türkiye	12.7
Brazil	12.3
Source: World Steel Association	

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Top 10 Major Importing countries

Top 10 Importers of Steel (Million Tonnes)	
Country	2023
European Union	39.2
United States	26.4
Germany 2	18.7
Italy 2	18.7
Türkiye	18
Mexico	17.5
South Korea	15
Viet Nam	14
Thailand	13.7
Indonesia	12.4
Source: World Steel Association	

Top 10 Major producing States in India

c) Major changes in the polices governing trade in the spot markets of the commodity

- Nil
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d) Geopolitical issues in the commodity and its impact on Indian scenario

Factors which affected Steel prices in FY 2023-24

- The steel demand remained exceptionally strong led by Government's spending on Infrastructure during 2023. The steel prices, however, saw volatility under the influence of international steel prices. As rising interest rates led to weak demand in the developed countries, China also saw weak demand despite removal of Covid related curbs. The weak China demand meant more exports out of China which pushed the international steel prices further down.
- Weak Global Outlook
- Political un-stability and war scenarios in Middle east.
- Sanctions on Russia

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2. TRADING RELATED PARAMETER

a. Monthly and Annual traded volume

Month	Traded volume (In Kgs)
Apr-23	1,70,000
May-23	40,000
Jun-23	-
Jul-23	-
Aug-23	-
Sep-23	-
Oct-23	-
Nov-23	-
Dec-23	-
Jan-24	-
Feb-24	-
Mar-24	-
Total	**2,10,000**

b. Annual traded volume as proportion of total deliverable supply : 0.0001%

- Annual Traded Volume (kgs): 2,10,000
- Deliverable Supply (kgs): 1,47,17,00,00,000

c. Annual traded volume as proportion of total annual production: 0.0778%

- Annual Traded Volume (kgs): 2,10,000
- Annual Production (kgs): 1,38,82,00,00,000

d. Annual average Open interest as proportion of total production: 0.00002%

- Annual Average OI (kgs): 28,000
- Annual Production (kgs): 1,38,82,00,00,000

e. Annual average Open interest as proportion of total deliverable supply: 0.00002%

- Annual Average OI (Kgs):28,000

  Annual Supply (Kgs): 1,47,17,00,00,000

f. Monthly and Annual value of trade

Month	Value Of trade (In Crores)
Apr-23	0.84
May-23	0.19
Jun-23	-
Jul-23	-
Aug-23	-
Sep-23	-
Oct-23	-
Nov-23	-
Dec-23	-
Jan-24	-
Feb-24	-
Mar-24	-
Total	**1.03**

g. Monthly and Annual quantity of delivery

Month	Quantity of Delivery (In Kg)
Apr-23	-
May-23	-
Jun-23	-
Jul-23	-
Aug-23	-
Sep-23	-
Oct-23	-
Nov-23	-
Dec-23	-
Jan-24	-
Feb-24	-
Mar-24	-
Total	**-**

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h. Monthly and Annual value of delivery

Month	Value of Delivery (In Rs.)
Apr-23	-
May-23	-
Jun-23	-
Jul-23	-
Aug-23	-
Sep-23	-
Oct-23	-
Nov-23	-
Dec-23	-
Jan-24	-
Feb-24	-
Mar-24	-
Total	**-**

i. Monthly and Annual Average Open Interest (OI)

Month	Average Monthly OI (In Kg)
Apr-23	5,70,000
May-23	40,000
Jun-23	
Jul-23	
Aug-23	
Sep-23	
Oct-23	
Nov-23	
Dec-23	
Jan-24	
Feb-24	
Mar-24	

Annual Average OI = 28,000 kg

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j. Annual average volume to open interest ratio: 33.93%

- Average Traded Volume (Kgs): 9,500
- Average Open Interest (Kgs): 28,000

k. Total number of unique members and clients who have traded during the financial year

- Unique Members = 4
- Unique Clients = 4

l. Ratio of open interest by FPOs/farmers/Hedge/VCP positions to total open interest (Annual average as well as maximum daily value)

- -

m. Number of unique FPOs / farmers and VCPs/hedgers who traded in the financial year

- Not Available

n. Algorithmic trading as percentage of total trading

- -

o. Delivery defaults

- Number of instances = Nil
- Quantity involved = Nil
- Value involved = Nil

3. Price Movements

a. Comparison, correlation, and ratio of standard deviation of Exchange futures price vis-à-vis international futures price (wherever relevant comparable are available)

- The correlation between Exchange Futures Prices and International Futures prices was 0.8604
- The ratio of Standard deviation for was 0.61

b. Comparison, correlation, and ratio of standard deviation of Exchange futures price vis-à-vis international spot price (wherever relevant comparable are available) and domestic spot price (exchange polled price)

- The correlation between Exchange Futures Prices and International spot Futures prices was 0.7748
- The ratio of Standard deviation was 0.83

c. Correlation between exchange futures & domestic spot prices along with ratio of standard deviation.

- The correlation between Exchange Futures and Exchange Spot prices was 0.9964
- The ratio of Standard deviation for the same period was 1.10

d. Correlation between international futures & international spot prices along with ratio of standard deviation

- The correlation between International Futures Prices and International spot prices is 0.8507
- The ratio of Standard deviation for the same period was 1.82

e. Comparison of Exchange polled price and mandi price (in case of agricultural commodities) / other relevant price (in case non-agricultural commodities) at basis centre

No Available

f. Maximum & Minimum value of daily futures price volatility and spot price volatility along with disclosure of methodology adopted for computing the volatility

Commodity	Max of Daily Futures Price Volatility %	Min Daily Futures Price Volatility %	Max of Daily Spot Price Volatility %	Min Daily Spot Price Volatility %
Steel Billets	1.77%	-2.90%	1.25%	-2.78%

g. Number of times the futures contract was in backwardation/contango by more than 4% for the near month contract in the period under review

- Instances Of backwardation – 0
- Instances of Contango – 0

4. Other's parameters

a. Qualitative and quantitative measure for Hedge effectiveness ratio and basis Risk (Volatility of Basis) along with disclosure of methodology adopted for such calculations

Hedge Effectiveness for FY 2022-23

Commodity	Hedge Efficiency
Steel Billets	99.29%

Note: Hedging efficiency is the 'R Square' value of the regression equation between BSE futures prices and BSE polled spot prices during the financial year.

Basis Risk for FY 2022-23

Commodity	Unit	Average Return of Basis (Unit)	Standard deviation
Steel Billets	Rs/MT	0.04	0.47

Note: Basis Risk is computed as the Standard deviation of daily normal return in Basis, which is excess of Spot over Futures price.

b. Details about major physical markets of the commodity vis-à-vis market reach in terms of availability of delivery centres (information to be provided state-wise and UT-wise)

Name of State	Name of the physical markets	Market Reach of Exchange delivery centres
Chhattisgarh	Raipur	Basis Centre
	Raigarh	No Delivery Centre
	Durg	No Delivery Centre
Punjab	Mandi Gobindgarh	No Delivery Centre
	Jalandhar	No Delivery Centre
Uttar Pradesh	Ghaziabad	No Delivery Centre
	Muzaffarnagar	No Delivery Centre
	Aligarh	No Delivery Centre
	Varanasi	No Delivery Centre
	Gorakhpur	No Delivery Centre
West Bengal	Kolkatta	No Delivery Centre
	Durgapur	No Delivery Centre
	Asansol	No Delivery Centre

c. Details about major physical markets of the commodity and average Open Interest for each month generated from those regions.

- BSE has its Delivery Centre as Raipur. Physical Marketwise OI data is not available

d. Details, such as number and target audience, of stakeholders' awareness programs carried out by the exchange

Nil

e. Steps taken / to be undertaken to improve hedging effectiveness of the contracts as well as to improve the performance of illiquid contracts

Nil