

#### KRN HEAT EXCHANGER AND REFRIGERATION LIMITED

(Formerly Known As KRN Heat Exchanger And Refrigeration Pvt. Ltd.)

Registered & Work Office: Plot No.: F-46,47,48,49, EPIP, RIICO Industrial Area, Neemrana-301705 (RJ) CIN No.: U29309RJ2017PLC058905 Ph No.:9116629184

#### Wednesday | November 06, 2024

To,	To,
BSE Ltd	National Stock Exchange of India Limited
Phiroze Jeejeebhoy Towers,	Exchange Plaza, C-I Block G, Bandra Kurla Complex,
Dalal Street,	Bandra (East),
Mumbai- 400001, Maharashtra, India	Mumbai-400051, Maharashtra, India
Script Code: 544263	Script Symbol: KRN

#### Sub: Investor Presentation under Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015

#### Dear Sir/Madam,

With reference to Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, please find enclosed herewith the copy of the Investor Presentation in relation to the Unaudited Standalone and consolidated Financial Results of the Company for the quarter and half year ended on 30<sup>th</sup> September 2024.

In compliance with Regulation 46 of the Listing Regulations, the Investor Presentation will also be available on the website of the Company at https://krnheatexchanger.com/investors/. Please acknowledge and take on your record.

Thanking You.

For and on behalf of KRN Heat Exchanger and Refrigeration Limited

Praveen Kumar **Company Secretary and Compliance Officer** ACS: 32631





## **KRN Heat Exchanger And Refrigeration Limited**

**Q2 FY25 Investor Presentation** 

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These risks and uncertainties include, but are not limited to, the performance of the Indian economy and of the economies of various international markets, the performance of the industry in India and world-wide, competition, the company's ability to successfully implement its strategy, the Company's future levels of growth and expansion, technological implementation, changes and advancements, changes in revenue, income or cash flows, the Company's market preferences and its exposure to market risks, as well as other risks.

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# Q2 & H1 FY25 Financial Highlights

## **Quarterly Profit & Loss Statement - Consolidated**



						In ₹ Lakhs
Particulars	Q2 FY25	Q2 FY24	YoY	H1 FY25	H1 FY24	YoY
Revenues	9,109.59	7,119.44		18,688.04	16,064.24	
Other Income	144.49	87.31		263.78	241.04	
Total Income	9,254.08	7,206.75	28.41%	18,951.82	16,305.28	16.24%
Cost Of Revenue Operation	6,441.82	5,072.56		13,539.29	11,702.65	
Employee costs	417.96	350.92		838.33	708.56	
Other expenses	439.03	347.52		730.01	738.84	
Total Expenditure	7,298.81	5,771.00		15,107.63	13,150.05	
EBITDA	1,955.27	1,435.75	36.38%	3,844.19	3,155.23	22.15%
EBIDTA (%)	21.17	19.93		20.32	19.34	
Finance Costs	110.44	120.56		211.60	202.37	
Depreciation	114.60	100.88		226.22	200.57	
PBT	1,730.23	1,214.31		3,406.37	2,752.30	
Tax	499.23	353.00		978.37	805.18	
Net Profit	1,231.08	861.31	42.98%	2,428.14	1,948.30	24.93%
Net Profit Margin (%)	13.35	12.00		12.84	11.94	

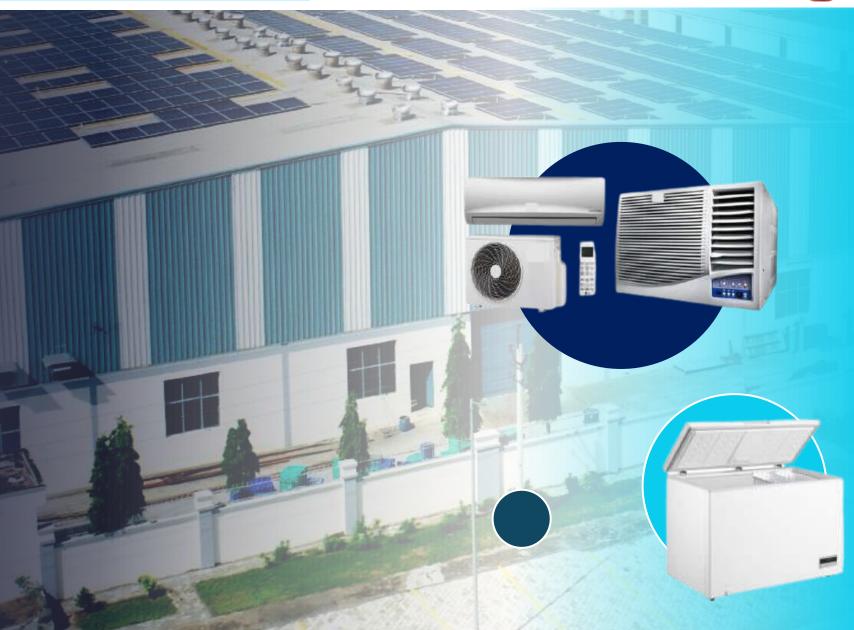


# **Company Overview**

## KRN Heat Exchanger And Refrigeration Limited: Customized Heat Exchanger Production

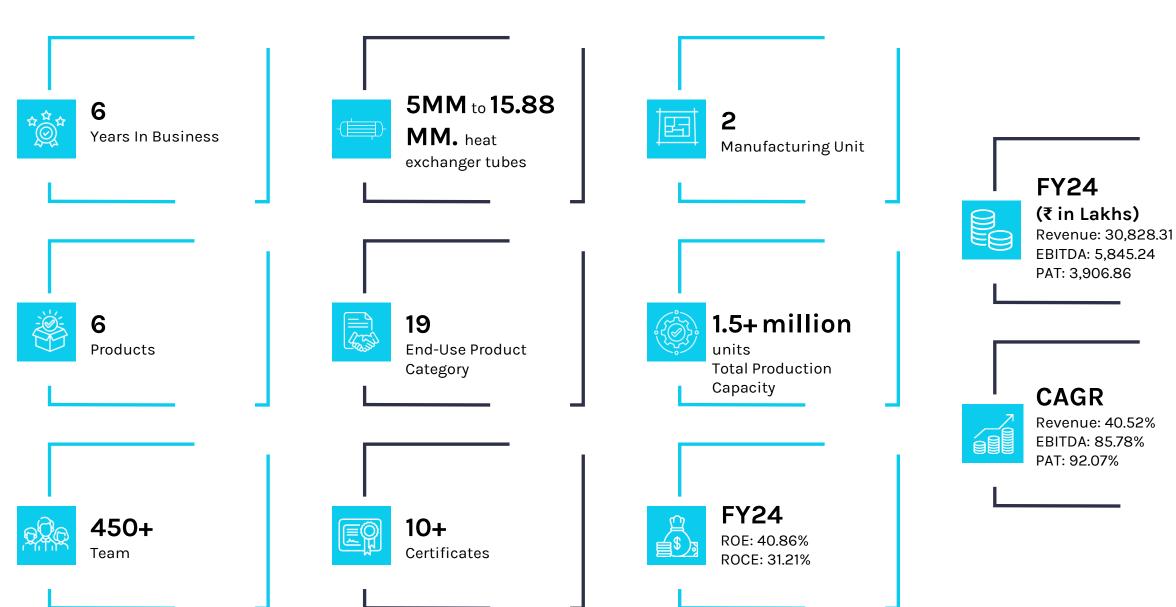


- KRN Heat Exchanger and Refrigeration Limited (KRN, The Company) specializes in manufacturing fin and tube-type heat exchangers for the HVAC&R industry. Using non-ferrous metals like copper and aluminum, KRN produces condenser coils, evaporator units, evaporator coils, header/copper parts, fluid and steam coils, and sheet metal parts.
- The company offers heat exchangers in various shapes and sizes, with tube diameters ranging from 5mm to 15.88mm, tailored to meet client requirements and industry standards.
- These products serve essential roles in air conditioning, heating, ventilation, refrigeration, and process cooling. KRN ensures product longevity and corrosion resistance with advanced nano and powder coatings. Known for quality and innovation, KRN partners with leading industry players like Daikin, Schneider Electric, and Blue Star, while strategically expanding its global reach and enhancing operational efficiency.
- The Company got listed on thr exchange on 3<sup>rd</sup> October 2024.



## **Essential Highlights**

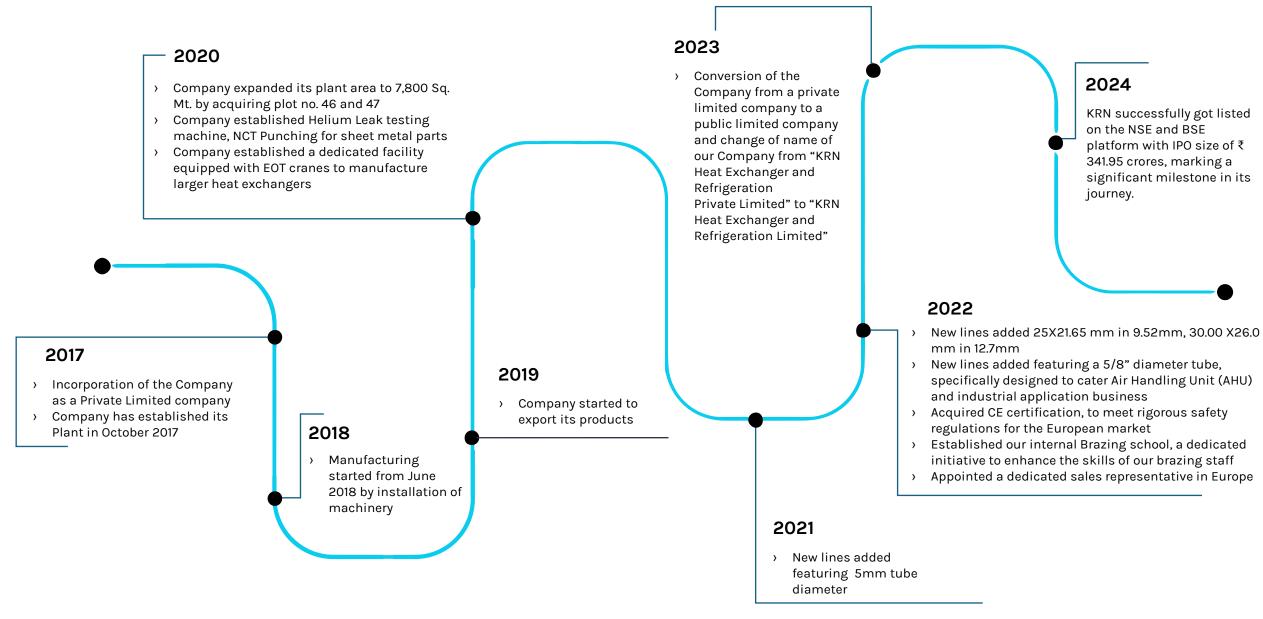




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## **Journey Of Growth**





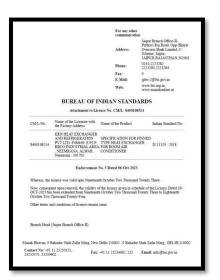
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### Certificates





ISO 45001:2018



IS 11329: 2018



ISO 14001:2015



**BS EN ISO 13134** 



ISO 9001:2015



**BS EN ISO 13535** 



**AHRI** 



UL-CA-2133826-0

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### Certificates





CERTIFICATE OF COMPLIANCE

Committee Name

Special Research

Compared Research

Septiment Research

Septim





UL-CA-2133828-0

UL-CA-2135187-0

UL-US-2135178-0

UL-US-2140353-0







UL-US-2141923-0

UL-US-2140355-0

UL-US-2141932-0

Investor Presentation

## KRN's Management: Transforming Energy Challenges Into Opportunities





Mr. Santosh Kumar Yadav Chairman and Managing Director



Mrs. Anju Devi Whole Time Director



Mr. Manohar Lal
Non-Executive Director



Mr. Srinivasa Rao Anasingaraju Independent Director



**Mr. Ketan Sharma** Independent Director



**Mr. Deepak Batheja** Independent Director



## **Business Overview**

#### **Innovative Products Solutions**





#### **Evaporator Coils**

- Components for cooling systems like close control air conditioners, rooftops, fan coils, dryers, etc.
- Extracts indoor heat, transferring it to refrigerant flowing through copper tubing
- Fins increase surface area for better heat exchange
- Ensures optimal cooling performance and energy efficiency with regular maintenance



## Fluid and Steam Coils

- Fluid coils for heating/cooling air in HVAC systems, integrated into Air Handling Units (AHUs)
- Steam coils transfer thermal energy from steam to air, used in industrial applications
- Versatile and efficient, handling large airflow volumes and hightemperature differentials



## Headers / Copper Parts

- Produced using stateof-the-art machines: CNC tube bender, CNC end forming, CNC flute punching, and Tube Tdrill
- Ensures high-quality construction with precise and consistent dimensions



#### **Condenser Coils**

- Releases heat into the environment, facilitating vapor to liquid conversion
- Bent coils with end plates enhance efficiency and compactness
- Precision bending and strategic end plates for efficient heat dissipation
- Used in household air conditioners to industrial cooling systems



## Condensing Units & Air-Cooling Units

- Custommanufactured units tailored to customer project requirements
- Comprised of a compressor, condenser coil, and fan motor
- Operated through an intuitive control panel for efficient regulation
- Various sizes and designs available



#### **Sheet Metal Parts**

- Manufacturer of both standard and customdesigned sheet metal components
- Utilizes hydraulic machines and CNC punching machines like NCT turret punch press
- Offers solutions for end plates for evaporator and condenser coils, and condensing units
- Customization capabilities for unique client specifications
- Cutting-edge technology for topnotch quality and efficient production

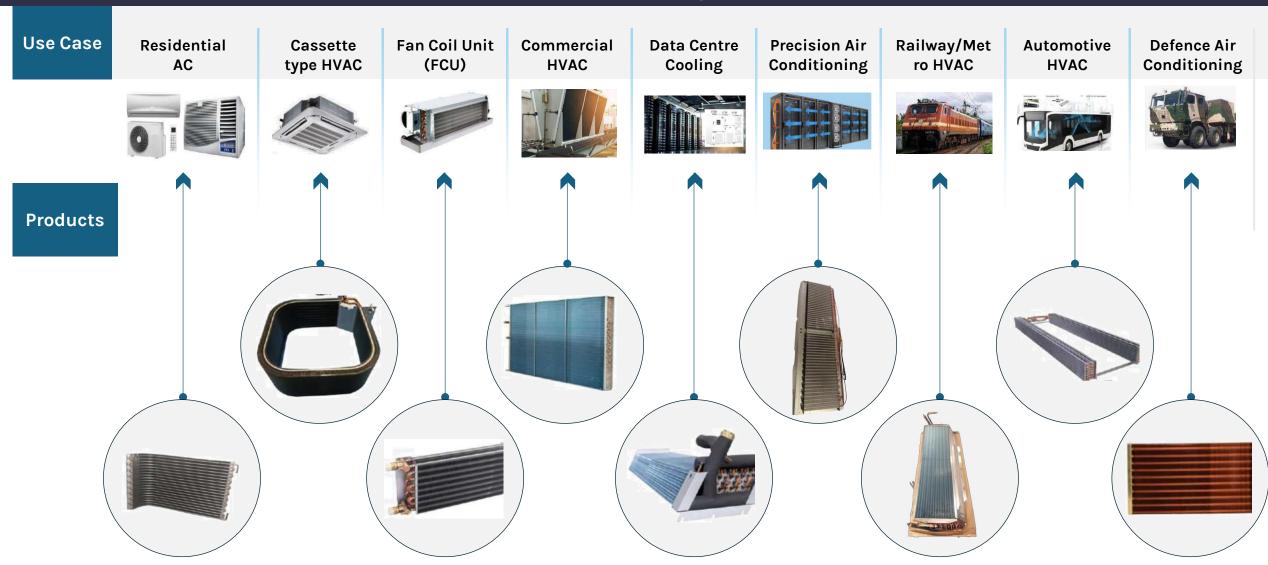
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Investor Presentation

## **Product & Usage Scenarios**



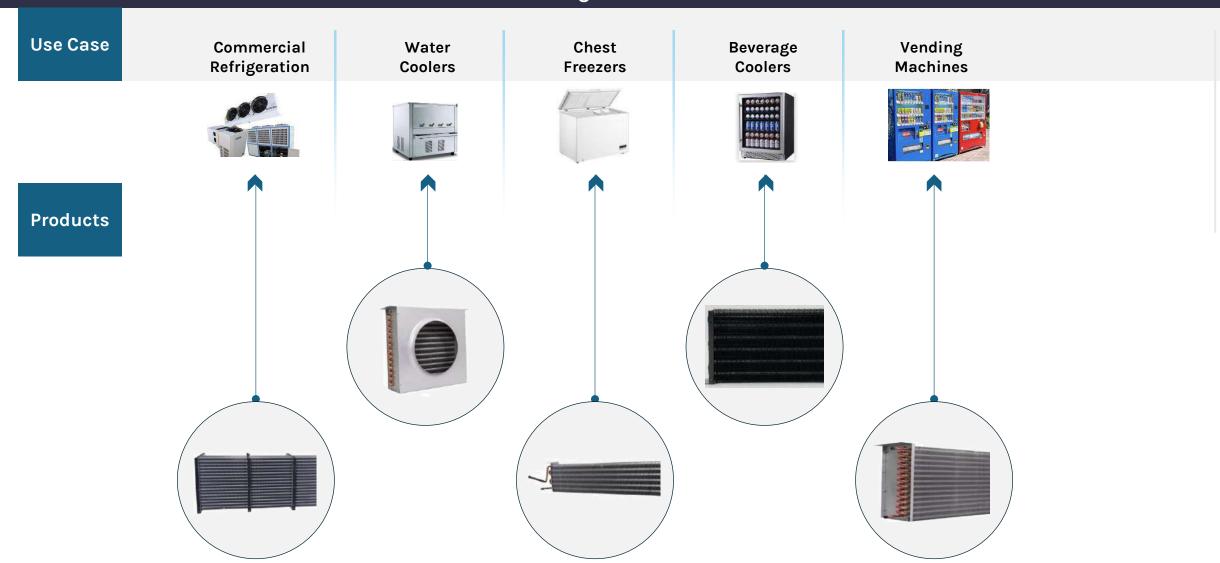
### Air Conditioning



## **Product & Usage Scenarios**

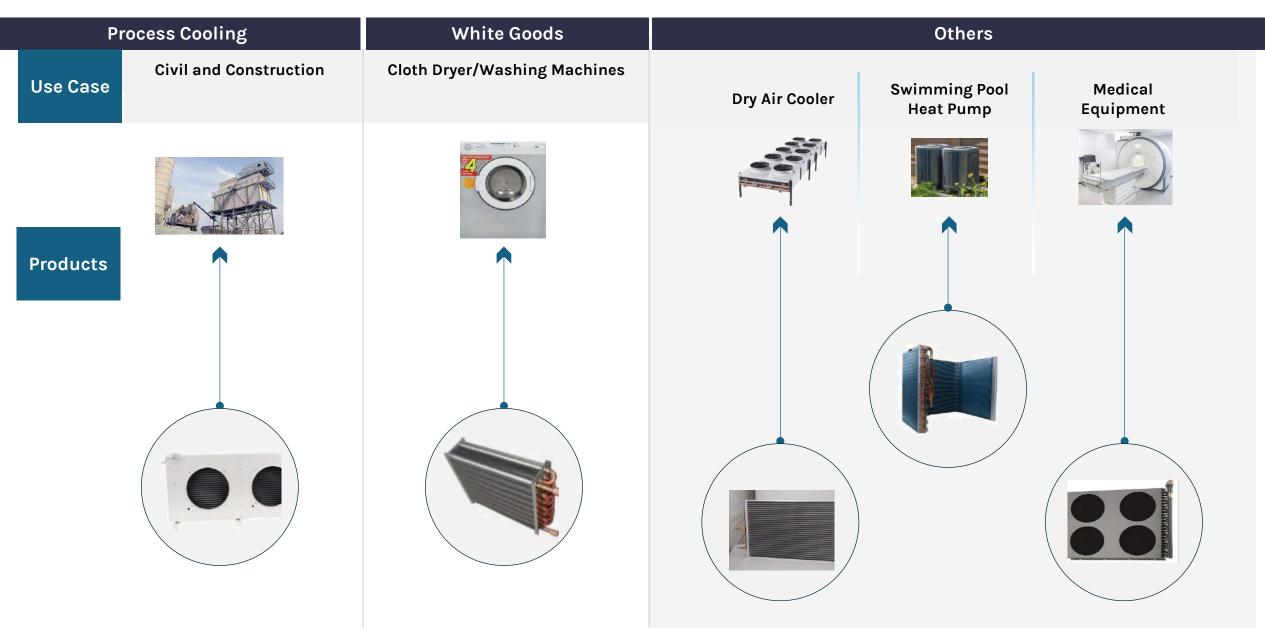


### Refrigeration



## **Product & Usage Scenarios**





#### **New Arrivals Preview**



The Bar & Plate Heat Exchanger is a device designed to recover heat from one fluid and transfer it to another without direct contact between the fluids. This is achieved through metallic plates, which are fine, grooved, and arranged to maximize heat diffusion across each surface. The design of the Plate Heat Exchanger ensures efficient heat transfer with optimal safety.

> **Bar & Plate Exchanger**

An oil cooler is a smaller, separate radiator from the engine's main radiator, designed to keep the oil supply at a consistent, optimal temperature. Its purpose is to cool the oil flowing through the coils, thereby enhancing the longevity of both the engine and transmission. Oil coolers are typically situated in a location where they can effectively dissipate heat.

> Oil Cooling **Unit with** Blower & Motor



Roll-Bond evaporators provide unique design flexibility for direct cooling refrigeration systems. Roll-Bond evaporators deliver efficient thermal performance in a product that can be shaped to fit most applications.













## **Product Quality & Innovation**



Quality Control:
In-house quality
checks like Helium
Leak Test, Water Leak
Test, Salt Spray
Testing.









Product Design:
Continuous
investment in
product design and
development.

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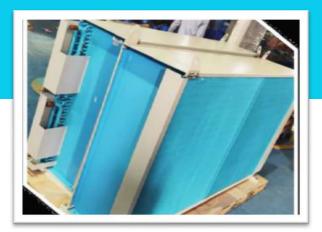
## **Advanced Coatings For Heat Exchanger Durability**



- o To enhance the longevity and corrosion resistance of heat exchangers and their components, advanced coatings such as nano coating and powder coating are applied to surfaces including copper tubes, brazing joints, and fin sheets.
- Nano coating provides a thin, protective layer at the nanoscale, offering enhanced corrosion resistance, improved longevity, self-cleaning properties, and reduced fouling.
- o This coating helps prevent corrosive elements from reacting with the metal, extends component life, and reduces maintenance needs.
- o Powder coating, on the other hand, involves electrostatically applying a dry powder that is then cured under heat, resulting in a durable, scratch-resistant, and corrosion-resistant finish
- o It ensures uniform coverage, even on complex shapes, and allows for aesthetic customization.



**Nano Coating** 



**Powder Coated with Nano Coating** 



**Bly Gold Coating** 

## **Stringent Testing For KRN Products**



- KRN maintains a dedicated in-house facility for rigorous quality checks on its manufactured products. Their quality control process
  includes a range of stringent tests to ensure product excellence.
- These tests encompass the Helium Leak Test, Water Leak Test, Contamination Test, Salt Spray Testing, Burst Pressure Testing, and Pressure Cyclic Testing.
- o By employing these comprehensive testing methods, KRN ensures that only the highest quality products are delivered to their customers.



Helium leak Testing Machine



**Contamination Testing** 



Salt Spray Test

## **Manufacturing Hub**





#### **Evaporator & Condenser Coils**

Installed Capacity: 5,66,551

Capacity Utilization: 84.09%

### **Headers/ Copper Parts:**

Installed Capacity: 6,18,667

Capacity Utilization: 84.53%

#### **Sheet Metal Parts**

Installed Capacity: 5,56,800

Capacity Utilization: 85.77%

### **Client Testimonials**



Daikin Airconditioning India Private Limited (since 2018) DAIKIN AIR CONDITIONERS

Schneider Electric IT Business India Private Limited (since 2019)



Schneider Electric IT Business India Private Limited (since 2019)



Blue Star Limited (since 2021)



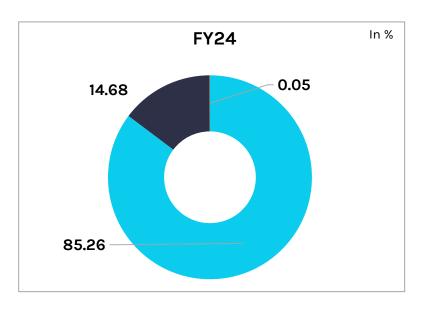
Climaventa Climate Technologies Private Limited (since 2021)

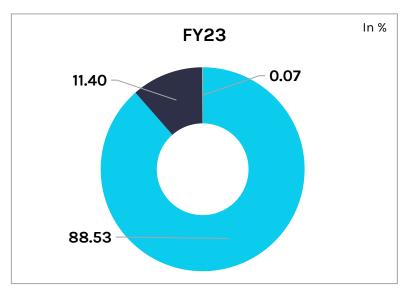
CLIMAVENETA

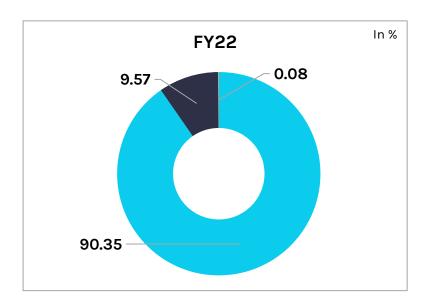


## Geographical Wise Revenue Breakup











In ₹ Lakhs

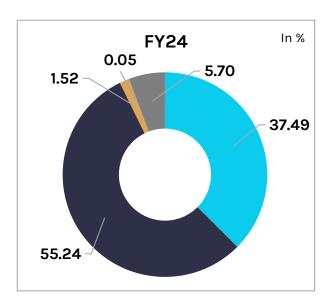
Particulars	FY24	FY23	FY22
Domestic Sales	26,285.23	21,909.86	14,105.54
Export Sales	4,526.64	2,820.26	1,493.63
Other Operating Income	16.44	17.96	12.29
Total	30,828.31	24,748.08	15,611.46

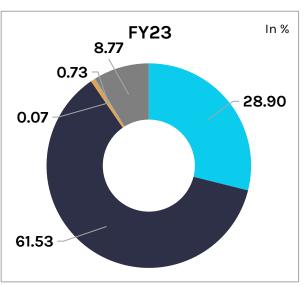
FY22 and FY23 figures are standalone & FY24 figures are consolidated.

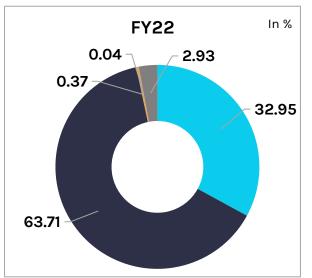
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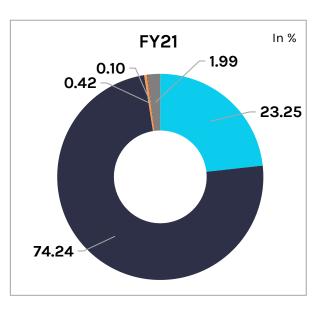
## **Product Wise Revenue Breakup**











Evaporator Coils Condenser Coils Headers/Copper Parts Sheet Metal Parts Other Operating Revenu	evenue
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In ₹ Lakhs

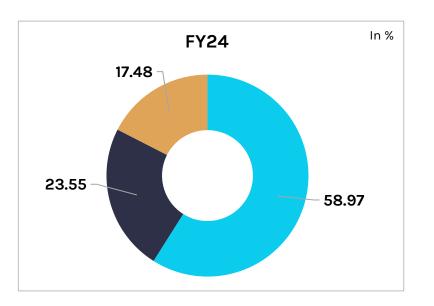
Particulars	FY24	FY23	FY22	FY21
Evaporator Coils	11,558.70	7,153.35	5,144.01	1,762.82
Condenser Coils	17,029.57	15,226.80	9,946.54	5,628.83
Headers/Copper Parts	467.81	181.69	57.19	32.17
Sheet Metal Parts	14.10	16.50	5.72	7.31
Other Operating Revenue	1,758.13	2,169.74	458	151.29
Total	30,828.31	24,748.08	15,611.16	7,582.42

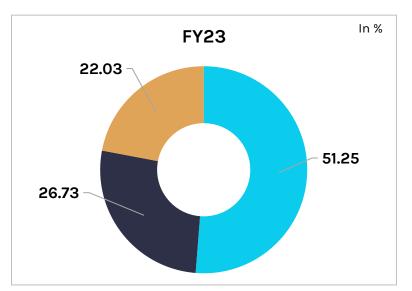
Investor Presentation

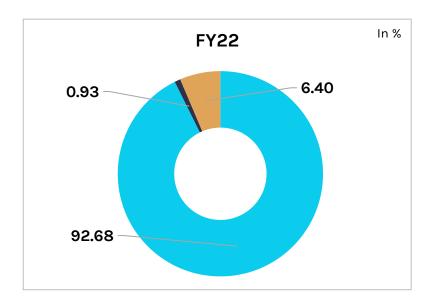
## **Continent Wise Revenue Breakup**



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	<del></del>	<del></del>	In ₹ Lakhs
Particulars	FY24	FY23	FY22
Asia	2,669.24	1,445.23	1,384.27
North America	1,065.97	753.75	13.83
Europe	791.43	621.18	95.53
Total Export Revenue	4,526.64	2,820.26	1,493.63
Total	30,828.31	24,748.08	15,611.46

North America

Europe

Asia

FY22 and FY23 figures are standalone & FY24 figures are consolidated.

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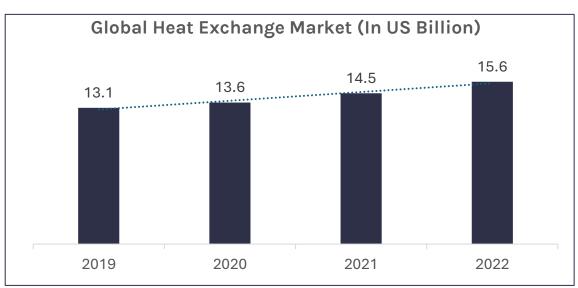


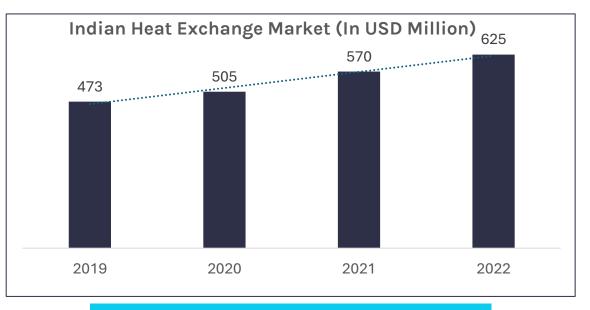
# **Industry Overview**

## Global & Indian Heat Exchanger Market

KRN

- The global heat exchanger market was valued at USD 15.6 billion in 2022, with an annual growth rate (CAGR) of 6.2% from 2019 to 2022.
- This growth is driven by the increasing demand for sustainable, lowenergy consumption and cost-effective solutions. Industries worldwide are investing in technologies and processes to reduce costs and improve operational efficiency, aligning with the evolution towards Industry 4.0, which integrates digital technologies.
- This shift has spurred innovations in both products and systems, particularly in heat exchanger designs aimed at enhancing thermal efficiency, reducing energy costs, and cutting carbon footprints.
- The Indian heat exchanger market reached USD 625 million in 2022, with a 10% CAGR from 2019 to 2022.
- Growth slowed to 6% in 2020 due to the pandemic but rebounded with an 11% average annual increase in 2021 and 2022.
- Rapid industrialization, urbanization, and infrastructure development have driven strong demand for heat exchangers in India.





Primary Research, D&B Estimates

Source: https://tinylink.onl/8uot

Investor Presentation 2

## Growth Forecast In Indian Finned Tube Heat Exchanger Market





The demand for finned tube heat exchangers in India is expected to rise significantly due to the expanding HVAC market.



This growth is driven by real estate construction, manufacturing, warehousing, and transportation sectors. The Indian HVAC market, valued at USD 7.8 billion in 2021, is projected to reach nearly USD 27.4 billion by 2030.



Consequently, the increased production of HVAC equipment will boost the demand for heat exchangers.



The annual turnover for finned tube heat exchangers is anticipated to grow from USD 133 million in 2022 to nearly USD 277 million by 2029, almost doubling in size.



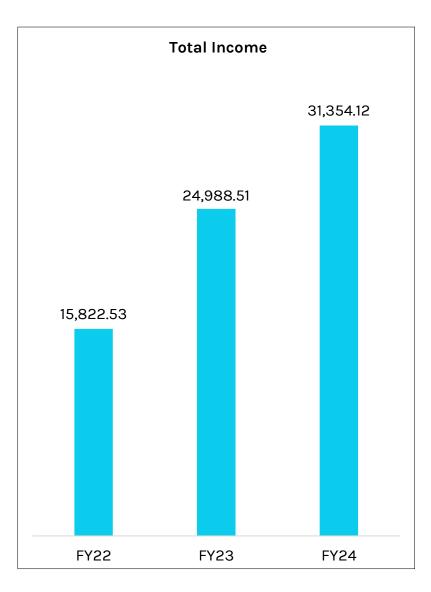
Source: https://tinylink.onl/8uot

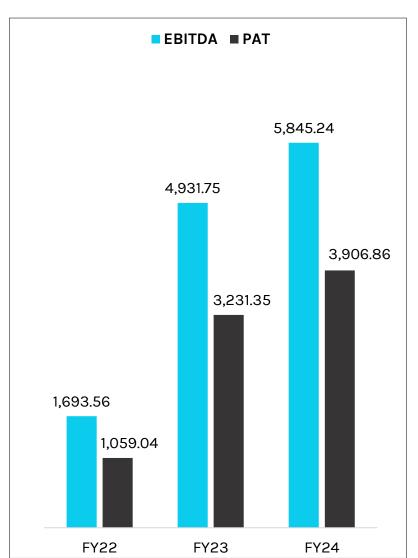


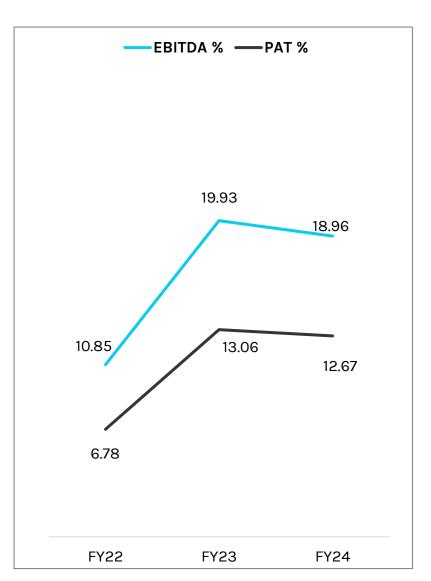
## **Financial Overview**

## **Key Financial Statement**









All Amount In ₹ Lakhs & Margins In %

## **Profit & Loss Statement**



			In ₹ Lakh
Particulars Partic	FY24	FY23	FY22
Revenues	30,828.31	24,748.08	15,611.46
Other Income	525.81	240.43	211.07
Total Income	31,354.12	24,988.51	15,822.53
Cost Of Revenue Operation	22,225.58	17,628.87	12,263.86
Employee costs	1,310.41	927.80	607.21
Other expenses	1,447.08	1,259.66	1,046.83
Total Expenditure	24,983.07	19,816.33	13,917.90
EBITDA	5,845.24	4,931.75	1,693.56
EBIDTA (%)	18.96	19.93	10.85
Finance Costs	398.58	305.37	154.38
Depreciation	399.05	317.14	253.53
PBT	5,573.42	4,549.67	1,496.72
Tax	1,666.56	1,318.32	437.68
PAT	3,906.86	3,231.35	1,059.04
Minority Interest	0.05	0.00	0.00
Other Comprehensive Income	4.20	-0.16	0.03
Total comprehensive income for the year	3,902.66	3231.51	1059.01
PAT (%)	12.67	13.06	6.78
5.00			

FY22 and FY23 figures are standalone & FY24 figures are consolidated.

Investor Presentation

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## **Balance Sheet**



Equities & Liabilities	FY24	FY23	FY22
Equity	4,613.66	4,400.00	440.00
Reserves	8,551.05	1,557.01	2,113.15
Non-Controlling Interests	0.05	0.00	0.00
Net Worth	13,164.71	5,957.01	2,553.15
Non-Current Liabilities			
Non-Current Borrowings	1,296.94	1,653.86	1,100.59
Deferred Tax Liabilities	10.39	28.59	35.70
Other Long-Term Liabilities	0.00	0.00	0.00
Long Term Lease Liabilities	1,636.05	0.00	0.00
Long Term Provision	69.15	35.46	25.54
Total Non-Current Liabilities	3,012.53	1,717.91	1,161.83
Current Liabilities			
Current Borrowings	4,672.25	2,010.57	1,111.62
Short Term Lease Liabilities	1,090.72	0.00	0.00
Trade Payables	3,660.40	4,940.95	4,019.88
Short Term Provision	125.26	97.19	68.13
Other Current Liabilities	110.51	152.28	364.58
Total Current Liabilities	9,659.14	7,200.99	5,564.21
Total Equity & Liabilities	25,836.43	14,875.91	9,279.19

		In ₹ Lakhs
FY24	FY23	FY22
8,764.18	3,287.48	2,170.52
0.00	0.00	0.00
0.00	0.00	0.00
0.00	11.00	11.00
8,764.18	3,298.48	2181.52
8,440.52	5,508.43	2,130.85
5,244.41	3,865.83	2,979.02
1,599.50	1,550.70	1,418.69
53.47	100.73	54.97
1,734.35	551.74	514.14
17,072.25	11,577.43	7,092.67
25,836.43	14,875.91	9,279.19
	8,764.18  0.00  0.00  0.00  8,764.18  8,440.52  5,244.41  1,599.50  53.47  1,734.35  17,072.25	8,764.18 3,287.48  0.00 0.00  0.00 0.00  0.00 11.00  8,764.18 3,298.48  8,440.52 5,508.43  5,244.41 3,865.83  1,599.50 1,550.70  53.47 100.73  1,734.35 551.74  17,072.25 11,577.43

FY22 and FY23 figures are standalone & FY24 figures are consolidated.

— Investor Presentation

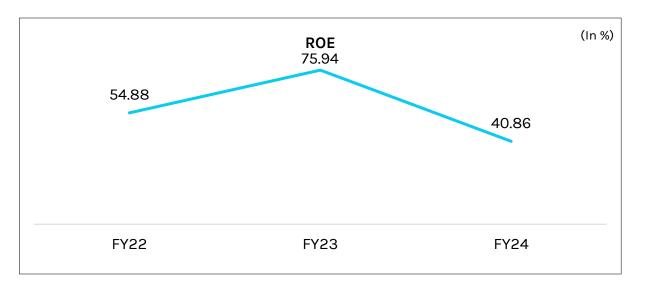
## **Cashflow Highlights**

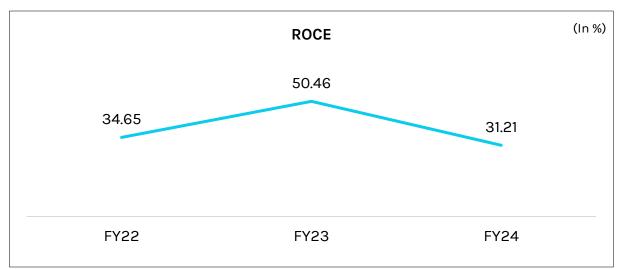


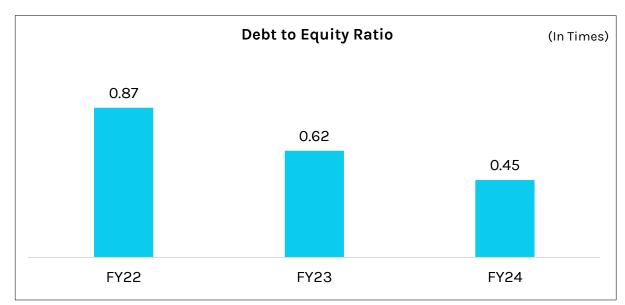
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Particulars	FY24	FY23	FY22
Cashflow from Operations	275.88	507.25	448.35
Cashflow from Investments	-6,636.28	-1,398.69	-271.69
Cashflow from Financing	6,645.51	1,101.09	338.37
Net Cash Flow	285.11	209.65	515.03

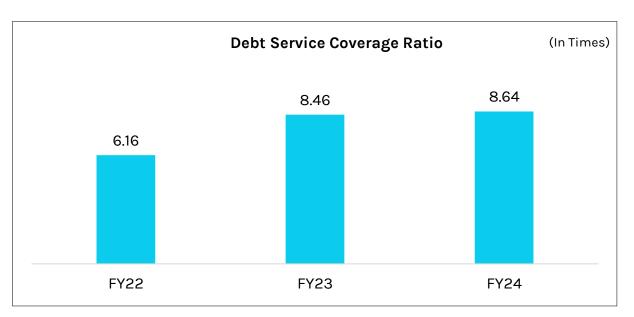
## **Key Ratios**









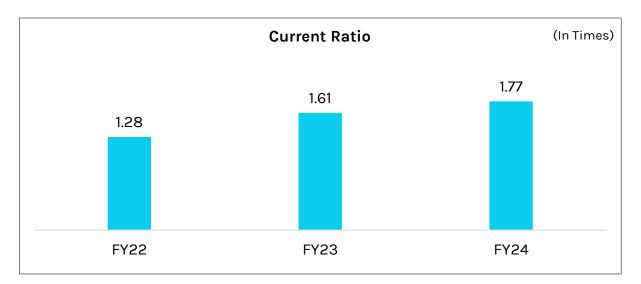


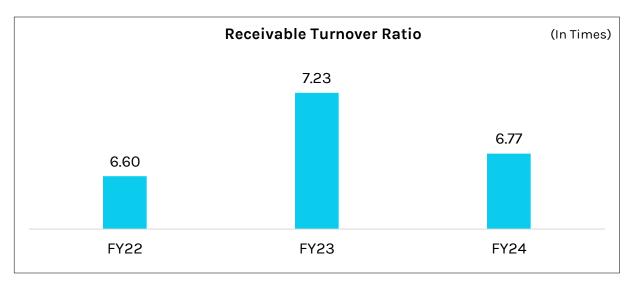
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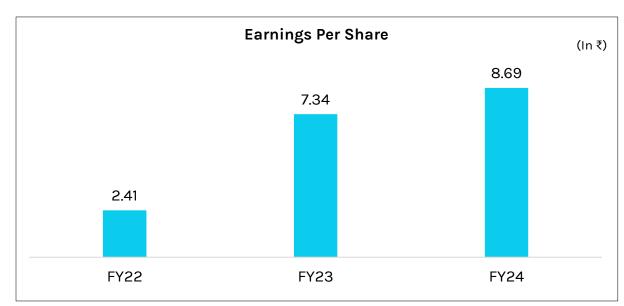
Investor Presentation

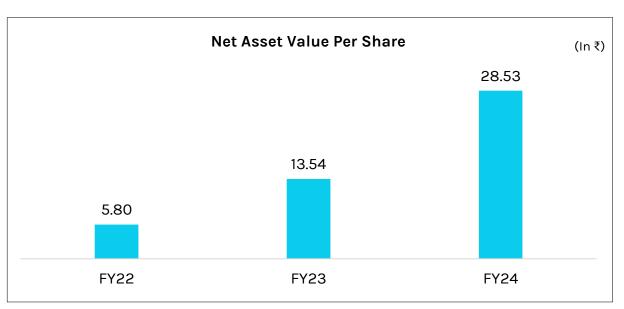
## **Key Ratios**











FY22 and FY23 figures are standalone & FY24 figures are consolidated.

Investor Presentation



# The Way Forward

### **Core Competencies**



# Strong leaders with experienced senior management

## Effective quality control checks

## Consistent financial performance

## Established Manufacturing facility

# Long-standing business relationships with leading clientele

- Strong leadership from experienced promoters and senior management
- Promoters with extensive experience in engineering, business development, operations, administration, marketing, and HR
- Founder and Director Santosh Kumar Yadav with over 19 years of experience in manufacturing heat exchangers and refrigeration units
- Highly qualified employees:
- 29 with Diploma in Mechanical Engineering
- 16 with Bachelors of Technology
- 1 with Master of Business Administration
- Continuous in-house training to diversify and update skill
  sets

- In-house facility for stringent quality control checks including: Helium Leak Test Water Leak Test, Contamination Test, Salt Spray Testing, Burst Pressure Testing, Pressure Cyclic Testing
- Key employees hold BS EN ISO-13585 certification
- Dedicated quality management team of 41 employees (including 25 contractual employees)

- Growth from a single product to a multi-product manufacturing company
- Consistent growth in revenues and profitability
- Revenue from Operations (CAGR: 48.34%)
- EBITDA (CAGR: 108.70%)
- Profit After Tax (CAGR: 135.77%)
- Strong margins and returns on equity and capital employed

- Located in RIICO industrial areas of Neemrana city
- Equipped for end-to-end manufacturing activities
- Full-service capabilities:
  product design, development,
  material sourcing, designing,
  testing, and measurement
  infrastructure
- Cost advantages over competitors due to in-house control over quality and processes
- Precision engineering and technology-driven manufacturing processes
- Ability to meet bespoke and stringent customer requirements
- Cost-effective manufacturing without compromising on quality

- Sustained relationships with leading clients like:
- Daikin Airconditioning India Private Limited (since 2018)
- Schneider Electric IT Business India Private Limited (since 2019)
- Kirloskar Chillers Private Limited (since 2020)
- Blue Star Limited (since 2021)
- Climaventa Climate
   Technologies Private Limited
   (since 2021)
- Focus on understanding and catering to diverse customer requirements

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## **Strategic Direction**





Served 112 customers in FY 2022-23

- Top 10 customers accounted for 75.94% of revenue
- Presence in 17 states in India and exports to 9 countries
- Strategy to deepen market penetration and reduce dependency on top customers
- · Aim to tap into new markets and increase customer network

Focus on increasing operational efficiencies to improve returns

- Focus on offering quality products at attractive prices
- · Initiatives to improve cost efficiency

Enhancing existing product base and product quality

Commitment to high-quality, safety-compliant products Close interaction with customers to understand market perception and demand Incorporation of KRN HVAC Products Private Limited for new manufacturing facility Products to be manufactured:

- Bar & Plate Heat Exchanger
- Oil Cooling Unit with Blower & Motor
- · Roll Bond Evaporator

Regular Improvement in product design and development

- Dedicated in-house product design and development center
- Design team focuses on new designs of heat exchangers
- Expenditure on product design and development:
  - o FY 2022-23: ₹11.88 lakhs FY 2021-22: ₹19.31 lakhs FY 2020-21: ₹12.95 lakhs FY 2019-20: ₹13.59 lakhs
- Supported by a team of 7 employees

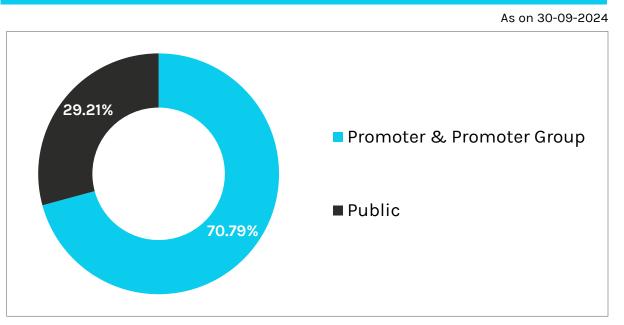
Increasing our global footprint and augmenting growth in current geographies

- Diversifying customer base and increasing market share
- Focus on expanding customer network across Europe
- Strategy to create a strong local presence in North America and Europe
- Revenue generated in different continents:
  - Europe: 2.11% of total revenue
  - North America: 3.31% of total revenue
  - Asia: 9.35% of total revenue

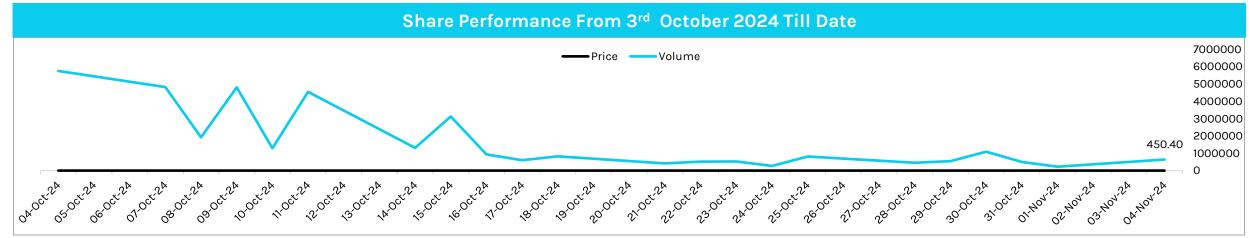
### **Stock Data**



Stock Information			
	As on 05-11-2024		
NSE Code	KRN		
BSE	544263		
ISIN	INE0Q3J01015		
Share Price ₹	450.40		
Market Capitalization ₹ Cr	2,799.53		
No. of Share Outstanding	6,21,56,600		
Face Value ₹	10.00		
52 Week High ₹	513.50		
52 Week Low ₹	402.10		



**Share Holding Pattern** 



Source: NSE



#### KRN Heat Exchanger And Refrigeration Limited

Plot No. F-46,47,48,49, EPIP, RIICO Industrial Area,

Neemrana - 301705 (RJ) **Phone**: +91- 9257025440

Website: <a href="https://krnheatexchanger.com">https://krnheatexchanger.com</a>
Email: cs@krnheatexchanger.com



#### **Kirin Advisors Private Limited**

713-B, Lodha Supremus II, Wagle Estate,

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