

Company Background

Harsha Engineers International is a part of Harsha Group which was established in 1986 and has over 35 years of operating history in the engineering business. The company was incorporated as a private limited company in 2010 and subsequently, on Jan 1, 2022, its name was changed to Harsha Engineers International Limited upon conversion from a private to a public company.

Key Highlights of the Company

- Dominant market share in the organised bearings market:** Harsha Engineers International is the largest manufacturer of precision bearing cages in the organized sector in India in terms of revenues with ~50-60% contributed domestically. It stands amongst the leading manufacturers of precision bearing cages in the world and commands a share of 6.5% in the global organized bearing brass, steel, and polyamide cages market in CY21.
- Wide range of offerings across end-user industries:** The company has built a diversified product portfolio having different types of bearing cages by leveraging its design, development, and technological capabilities. It has the capacity to manufacture over 7,205 bearing cages and over 295 other products that cater to the varying requirements of customers operating in the Automotive, Railways, Aviation & Aerospace, Construction, Mining, Agriculture, Electrical & Electronics, and Renewable sectors. Furthermore, over the past 3 years, the company has developed more than 1,200 products in different bearing types.
- Strategically located manufacturing facilities:** The company has four strategically located manufacturing facilities with warehouses at 20+ locations globally catering to customers in more than 25 countries across 5 continents. The manufacturing facilities are located at Changodar and Moraiya (near Ahmedabad, Gujarat), while the other two manufacturing units are located in Changshu (China) and Ghimbav Brasov (Romania).
- Well-place to capture EV opportunity:** Automobiles form ~23% of the global key end-user market for bearings. With the rising penetration of EVs, the bearings volumes are expected to grow at a CAGR of 5.2% over CY20-30. This is against a CAGE of 5.7% in a scenario with no EV penetration, as the number of bearings required in an EV is likely to be lower as compared to the ones required in an ICE. HEIL is not into manufacturing needle cages bearing (mainly used in ICE), and it will have a limited impact with the increasing penetration of electric vehicles. Furthermore, HEIL has the ability to develop customized bearings (commanding premium pricing) required for EVs which positions it well to tap into the growing demand and enhance its share of the business in this segment.
- Financial performance:** The company's revenue has grown at a CAGR of 22.1% to Rs 1,322 Cr in FY22 from Rs 886 Cr in FY20, while its EBITDA margins have improved from 11.3% to 14.1% during the same period. The PAT has grown 4.2x to Rs 92 Cr in FY22 from Rs 22 Cr in FY20. Furthermore, it has a low net debt-to-equity ratio of 0.68 as of March 31, 2022. The RoNW has improved from 5.8% in FY20 to 17.4% in FY22.

Objects of the issue

Purpose	Rs Cr
Pre-payment / scheduled repayment of a portion of the existing borrowings	270
Funding capital expenditure requirements towards the purchase of machinery	78
Infrastructure repairs and renovation of existing production facilities & office premises in India	7
General Corporate Purposes	[*]

Source: RHP

Financial Summary

(Rs Cr)	FY20	FY21	FY22
Equity Share Capital	50	50	77
Reserves & Surplus	322	377	445
Total Borrowing	419	357	385
Net Worth as stated	378	433	528
Revenues from operations	886	874	1321
EBITDA	100	125	187
EBITDA (%)	11.3	14.3	14.1
Net PAT	22	45	92
Net Profit Margin	2.5	5.2	7.0
Net Asset Value (Rs)	75.6	86.6	68.3
RONW (%) as stated	5.8	10.5	17.4
Debt service Coverage Ratio (X)	0.9	1.3	2.3

Source: RHP, Restated

Issue highlights

Issue size: Rs 755 Cr

Min Lot: 45 shares

Face Value: Rs 10/-

Employee Reservation: Rs 2.5 Cr

Issue summary

Price band: Rs 314 – Rs 330/share

Employee Discount: Rs 31/share

Bid Lot: 45 shares and in multiples thereafter

Issue opens: Sep 14, 2022

Issue closes: Sep 16, 2022

Tentative Listing: Sep 26, 2022

BRLM: Axis Capital, JM Financial, Equirus Capital

Registrar: Link Intime India Pvt. Ltd.

Shareholding (%)

	Pre-Issue	Post-Issue
Promoters	57.43%	43.46%
Promoter Group	42.27%	31.15%
Public	0.30%	25.39%
Total	100.00%	100.00%

	Pre issue	Post issue [#]
No. of shares (in Cr)	7.72	9.17/9.10

- Lower Price Band/ Upper Price Band

Issue break-up

Category	Shares (in Cr)#	% of issue	Rs In Cr
QIB	1.2 / 1.14	50	376.25
Non-Institutional	0.36/0.34	15	112.88
Retail	0.84/0.80	35	263.88
Employee (abs no. of shares)	88,835 / 83,610	-	2.5

- Lower Price Band/ Upper Price Band

Fresh Issue up to	Rs 455 Cr
Offer for sale of up to	Rs 300 Cr
Post Issue Implied Market Cap =	Rs 2,881 Cr- Rs 3,005 Cr

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Business Overview

The company is a part of Harsha Group which was established in 1986 and has over 35 years of operating history in the engineering business. The company was incorporated as a private limited company in 2010. In order to consolidate the Harsha Group's India engineering business and solar EPC business, a corporate re-organization was done effective April 01, 2020. Subsequently, the name of the company was changed to Harsha Engineers International Limited upon conversion from a private to a public company on Jan 1, 2022.

Harsha Engineers International is the largest manufacturer of precision bearing cages, in terms of revenue, in the organized sector in India, and among the leading manufacturers of precision bearing cages in the world.

The company has mainly two business segments (a) engineering business which comprises manufacturing bearing cages (in brass, steel and polyamide materials), complex and specialized precision stamped components, welded assemblies and brass castings and cages & bronze bushings; and (b) solar EPC business, under which it provides complete comprehensive turnkey solutions to all solar photovoltaic requirements.

The company offers a wide range of precision engineering products across geographies and end-user industries. The company offers bearing cages from 20 mm to 2,000 mm in diameter. The end-user industries where bearing cages are used include automotive, railways, aviation & aerospace, construction, mining, agriculture, electrical and electronics, renewables sectors etc.

Harsha Engineers International commands 50-60% of the market share in the organized segment of the Indian bearing cages market and 6.5% of the market share in the global organized bearing cages market for brass, steel and polyamide cages in CY 2021.

With a strong focus on quality, design and tool development aided by technology, the company has developed products suited to its customers' requirements. The company possesses the expertise to design and develop advanced tooling in-house which enables it to manufacture precision bearing cages and complex and specialized precision stamped components.

The company has diversified its product portfolio into different types of bearing cages mainly due to design, development and technological capabilities. The company can manufacture 7,205+ bearing cages and 295+ other products for customers in the automotive, railways, aviation & aerospace, construction, mining, agriculture, electrical and electronics, and renewables sectors, to cater to the varying customer requirements. Further, the company has developed more than 1,200 products in different bearing types, over the past 3 years.

Harsha Engineers International has four strategically located manufacturing facilities for its engineering business with one of its main manufacturing facilities at Changodar and one at Moraiya, near Ahmedabad in Gujarat in India, and one manufacturing unit each at Changshu, China and Ghimbav Brasov in Romania.

Strategically located manufacturing facilities



Source: RHP

The company's customers are spread over 25 countries covering five continents i.e., North America, Europe, Asia, South America and Africa. The company has entered into agreement arrangements to stock inventory in warehouses spread across more than 20 locations across the world including in, Europe, the US, China and South America; this helps to meet the just-in-time inventory requirements of its customers.

Revenue Break up

	FY20	%	FY21	%	FY22	%
Revenue - Engg Business	822	93%	820	94%	1,239	94%
Solar-EPC and O&M	64	7%	54	6%	83	6%
Total	886	100%	874	100%	1322	100%

Source: RHP; Revenue in Rs Cr

Break up of Engg revenues

	FY20	%	FY21	%	FY22	%
Engg revenue from Top 5 Customers	643	73%	632	72%	932	71%

Source: RHP; Revenue in Rs Cr

Geography- wise break up of Engg. Revenues

	FY20	%	FY21	%	FY22	%
Revenue - Engg Business	822	93%	820	94%	1,239	94%
Solar-EPC and O&M	64	7%	54	6%	83	6%
Total	886	100%	874	100%	1322	100%

Source: RHP; Revenue in Rs Cr

The company's Revenues have grown at a CAGR of 22.1% from Rs 886 Cr in FY20 to Rs 1,322 Cr in FY22, while the EBITDA margins have improved from 11.1% to 13.9% during the same period. The PAT has grown by 4.2 X from Rs 22 Cr in FY20 to Rs 92 Cr in FY22. Further, it has a low net debt-to-equity ratio of 0.68 as of March 31, 2022. The RoNW has improved from 5.8% in FY20 to 17.4% in FY22.

Company's Products

The company manufactures bearing cages, semi-finished brass castings, specialty stamping components and bronze castings and bushings.

Bearing Cages comprise roller cages and ball-bearing cages. The cages offer high rigidity, strength and high heat-resistant operating conditions. The company manufactures precision bearing cages that form one of the five components of a bearing; other such components being, the inner ring, outer ring and rolling elements like rollers or balls and cages.

Harsha Engineers International caters to the various customers' requirements by customizing the type of base material, as well as the design to be applied for the bearing cages. The company primarily manufactures bearing cages out of brass, steel and polyamide, which represent the most common types of base materials used in the bearing cages market. Over the past five years, the company's product development and innovation centre have developed more than 7,500 types of products for different bearing cage and stamping divisions.

Steel Cages: The company offers various grades of steel cages as per the requirements of its customers. The size of the steel cages ranges upto 1,000 mm and the company manufactures more than 3,700 types of steel cages.

Brass Cages: The company produces more than 3500 types of brass cages. The size of the brass cages ranges upto 2000 mm and foundry castings upto 2000 mm. Brass cages are generally manufactured from semi-finished brass castings which may be cast in-house and then machined into bearing cages or stamped from brass strips or turned out of brass tubes.

Polyamide Cages: The company offers injection moulded polyamide cages. The Company manufactures more than 80 types of polyamide cages with sizes ranging upto 300 mm including thrust ball bearings, cylindrical roller thrust bearings, linear ball bearings, water pump bearings and other special types of bearings.

Bronze Bushes for sliding bearing: Utilizing the experience of Casting and Machining Brass alloys for bearing cages, the company has diversified in producing bronze bushes for sliding bearings. These bushes are predominantly used in the gearboxes for Wind turning in Planetary Axels. The company is able to cover the range of bushes in terms of OD and Height ranging from 200 mm to 600 mm OD and 200 mm to 800 mm height.

Specialty Components: In order to scale up the business over the next 3-5 years the company plans to capitalize on the existing niche low volume high value products in the stamping and special component segment. It plans to continue manufacturing specialized parts/components and supplying to auto component assembly manufacturers. Currently, the company provides comprehensive metal stamping solutions ranging from simple to complex designs and geometries.

Solar EPC Business: Additionally, the company has an EPC business. It provides complete turnkey solutions to all solar photovoltaic requirements from site identification, land acquisition, obtaining permits and approvals and setting up the Solar PV power plant including power evacuation infrastructure.

EPC business is broadly classified into (i) Ground mount projects; (ii) Rooftop projects; and (iii) Operations and maintenance of ground mount and rooftop projects. As of March 31, 2022, the company's total ground mount project installation is above 342 MW and its rooftop mount project installation is above 60 MW. Currently, the company O&M team is managing more than 202 MW of solar PV projects.

Key Business Strategies

Enhance market leadership in bearing cages and expanding the customer base

As per CARE Advisory Report, Asia Pacific markets in general and India, in particular, are poised to do well in terms of bearing demand growth in the automotive and industrial machinery markets. Further, the expected growth in the usage of bearings in several applications such as mining, automotive, heavy machinery, infrastructure development, power generation and construction is forecasted to drive the demand for bearings market and it is expected to grow at a CAGR of 6% to 8% over the period 2021 to 2029 and is estimated to be valued at USD 171.7 Bn in the year 2029. The company plans to continuously develop newer types of bearing cages with a special focus on larger diameter bearing cages (above 400 mm), to keep up with the evolving demands of the customers.

The company is considered a versatile and consistent player in the bearing cages segment in China and it plans to further expand its base in China. Moreover, it intends to further expand into the Japanese bearing market by supplying directly to its Japanese customers at its locations in Japan. Additionally, it intends to leverage the European presence to grow its India business share in Europe by (i) procuring higher outsourcing orders from Europe-based Indian customers; and (ii) capitalizing on increasing opportunities for outsourced components in Europe, from new customers and by increasing the supplies to existing customers.

Focus on developing products suited to capture market opportunity in the growing electric vehicle segment

As the automobile segment is shifting focus to electric vehicles the need for more silent and lighter bearings, and their components, will be felt, and the demand is likely to increasingly shift towards precise dimension and dirt-free bearings, with steel and polyamide cages as a probable solution at a premium value. The company's in-house tool and design facilities coupled with the latest machinery specialized cleaning equipment and software would enable it to manufacture precision stamping components and steel cages suited for the electric vehicle segment including as import substitutes. Additionally, the company has also invested in enhancing its tool room and design capacity for faster cage mold development to focus more on developing polyamide cages in different categories to meet the increased demand from the electric vehicles space in the coming years.

Retain and strengthen technological leadership through a focus on development and automation.

The company plans to intend to digitalize its operations by implementing an IoT system to connect the relevant machines or equipment and improve the operational process performance. Over the past five years, the product development and innovation centre has developed more than 1,217 products for different bearings (including ball bearing, brass bearing, cylindrical roller bearing, large-size bearing, polyamide bearing, spherical roller bearings), taper and bronze bushings and more than 58 other products including speciality components. To further strengthen its technological capabilities, the company plan on acquiring and installing CNC lathes, high precision jig boring machine and automating its existing production lines. It also plans to build a new development centre having modern software for designs and simulations for new designs of tools.

Growing the stamping and specialized component segment

The company plans on capitalizing on the existing niche and low-volume high-value products in the stamping and special component segment and gradually scaling up its business over 3-5 years. This growth is planned in two phases i.e. (i) manufacturing specialized parts/components and supplying to auto component assembly manufacturers and thereafter; (ii) change in supply process by manufacturing assemblies as composite components and supplying directly to OEMs. They have set up a dedicated stamping unit at the production unit at Moraiya and have installed certain machinery with tools for complex stamping at the primary manufacturing units.

Focus on increasing operational efficiencies to improve returns

The company has adopted the Total Productive Maintenance ("TPM") initiative across its plants in India to improve the operational efficiency and the reliability of its manufacturing processes by lowering breakdowns and rejections, and increasing focus on developing products suited to capture market opportunity in the growing electric vehicle segment. The company intends to use a variety of other manufacturing strategies, sourcing strategies and cost reduction strategies to continue to improve its operational efficiencies.

Focus on growth by opportunistic inorganic acquisitions and partnerships with customer

The company intends to pursue strategic alliances and inorganic growth opportunities. Over the years, the company has focused on moving up this value chain of complexity and specialization by enhancing its manufacturing capabilities to produce complex precision components for several of its customers. Historically, the company has entered into business agreements with several partners across bearing segments to ensure that they deliver customizable high quality and technologically advanced products at competitive prices to its customers.

Competitive Strengths

Comprehensive solution provider offering a diversified suite of precision engineering products

With a diversified product portfolio, the company offers comprehensive solutions across countries to various end-user industries. The company manufactures bearing cages in the range of 20 mm to 2,000 mm in diameter. It manufactures bearing cages (including cylindrical roller cages, spherical roller cages, deep groove cages, angular contact cages, thrust roller cages and taper roller cages), complex and specialized precision stamped components, welded assemblies and brass castings and bushings. Since its incorporation, it has manufactured more than 7,500 types of products in the automotive and industrial segments. It caters to industries that include automotive, aviation and aerospace, construction, mining, agriculture, electricals and electronics, and renewable sectors. The diverse set of end-user industries protects the company against fluctuation in demand for a specific product.

The company has recently expanded its product portfolio to introduce sand casting, value-added stamping components, bronze bushings etc. to cater to more end-user industries such as wind, mining and shipping sectors. The company supplies products to customers in over 25 countries covering five continents i.e. North America, Europe, Asia, South America and Africa.

A strong relationship with marquee customers

The company has a strong relationship with leading global bearing manufacturers in the automotive, railways, aviation & aerospace, construction, mining, agriculture, electrical and electronics, and renewable sectors. The company supplies its products to the top 6 global bearing manufacturers. The bearing cages market globally is concentrated among a few global bearing manufacturers with the top six global bearing manufacturers contributing to 54% of the market share in Fiscal 2022. Moreover, the company's relationship with these key global, bearing manufacturers spans more than 10 years. The top 10 customers contributed 44.7% of revenue from operations for FY22.

Strategically located domestic and international production facilities and warehouses

The strategic location of the manufacturing plants and warehouse has helped the company to penetrate the markets, overcome entry barriers and aid in becoming a key supplier to key global bearing players. The company has four strategically located manufacturing facilities spread across three countries in India, China, and Romania. The company has entered arrangements to stock inventory in warehouses in over 20 locations across the world, enabling just-in-time delivery to customers. Being in proximity to the customers has ensured greater cost-effectiveness, quicker delivery and faster turn-around times. As on March 31, 2022, the aggregate installed capacity across the four manufacturing facilities was 4,596 metric tonne per annum for castings and 1,097.87 million pieces per annum for bearing cages. Global presence has led to geographical diversification of revenues as well as enhanced the company's reputation resulting in higher orders from domestic clients.

Expertise in Tooling, design development and automation

The company has full-service capabilities across the product cycle including product design and development, material sourcing, designing and manufacture of complex tooling components, testing and measurement infrastructure, all under one roof for meeting the requirement of global customers. It employs machining as well as stamping processes in its manufacturing process. The machines are equipped for both individual and diversified processes, and their fungibility enables the company to employ them in the most optimum manner to suit the customer's preferences. Further, the company has used its engineering expertise and approach to innovation to partially automate some of the operations including secondary operations such as Vibro-finishing, visual inspection, washing, oiling etc.

A bearing cage is an important component within a bearing and requires the highest lead time for development and technical and tooling expertise, for its manufacture when compared to other components of a bearing. With comprehensive tooling, testing and measurement infrastructure and

independent tool designing capabilities, the company is well equipped to cater to the needs of the bearing manufacturers.

Strong, experienced and dedicated senior management team and qualified workforce

The company's promoters and senior management team are qualified engineers and have extensive experience and know-how in the engineering sector, including, business development, operations, administration, marketing and human resource management. The management team also includes a strong and experienced team of cross-functional professionals across senior and mid-level management. They leverage the understanding and experience of their senior management in successfully managing their operations and growth. In addition, they have a dedicated team of engineers along with another skilled and technically qualified workforce.

As on March 31, 2022, the company had a total of 2,198 employees, of whom approximately, 1,955 employees are skilled and technically qualified employees in the engineering business and 68 employees are skilled and technically qualified in the solar EPC business.

Board of Directors

- **Rajendra Shah** is the Chairman and Whole-time Director of the company. He has over 35 years of experience in the precision engineering business for bearing cages and stamped components. He is looking after the overall management of the company, mainly all financial matters.
- **Harish Rangwala** is the Managing Director of the company. He has 35+ years of experience in the precision engineering business for bearing cages and stamped components. Apart from the Renewable energy division, he is looking after the overall management of the company.
- **Vishal Rangwala** is the Promoter, CEO and Whole-time Director of the company. He has over 13 years of experience in the precision engineering business for bearing cages and stamped components. He is currently leading the marketing and corporate functions and is responsible for the overall strategic directions for the Harsha group.
- **Pilak Shah** is the Chief Operating Officer and Whole-time Director of the company. He has over 13 years of experience in the precision engineering business for bearing cages and stamped components. He is responsible for the overall strategic directions of the Harsha Group.
- **Hetal Ukani** is a Whole-time Director of the company. She is responsible for the Health and Safety of all employees and also plays a vital role in managing the Total Productive Maintenance function of the company.
- **Neharika Vohra** is an Independent Director of the company. She has been a Professor at IIM Ahmedabad for the last two decades. She has over 22 years of experience in teaching and research in the field of organizational behaviour.
- **Ambar Patel** is an Independent Director of the company. He is the Advisory Committee member for Health & Care Foundation and Aastha Charitable Trust.
- **Kunal Shah** is an Independent Director of the company. He is currently the Executive Director of Corporate Affairs at AIA Engineering Limited. He has established his own consulting Firm "Theoden Ventures LLP" and is the co-founder of Aurus. He has overall general management and financial experience.
- **Bhushan Punani** is an Independent Director of the company. He has been a member of the Central Advisory Board on Disability, National Advisory Committee on Accessible Election and Committee on Drafting of National Law on Disability.
- **Ramakrishnan Kasinathan** is an Independent Director of the company. He has worked with ACT India, Johnson & Johnson Limited, Best & Crompton Engineering Limited, SKF India Limited and Hindustan Zinc Limited. He is currently associated with Nexdigm Private Limited as a consultant.

Key Managerial Personnel

- **Maulik Jasani** is the Vice President – of Finance and Group Chief Financial Officer of the company. He has over 17 years of experience in accounting and finance. Prior to joining the Company, he has been associated with Cadila Healthcare Limited, Delhi Assam Roadways Corporation Limited and Mukesh M. Shah & Co, Ahmedabad. He was also associated with Biotech Vision Care Private Limited as the chief financial officer.
- **Kiran Mohanty** is the Company Secretary and the Chief Compliance Officer of the company. He has over 13 years of experience as a company secretary. Prior to joining the Company, he has been previously associated with Claris Injectables Limited, John Energy Limited, Sanghvi Forging and Engineering Limited and Siemens Healthcare Diagnostic Limited.

Industry Overview

HEIL is the largest manufacturer of precision bearing cages, in terms of revenue, in the organized sector in India, and among the leading manufacturers of precision bearing cages in the world. The company offers a diversified suite of precision engineering products across geographies and end-user industries. The company's business comprises: (i) engineering business, under which it manufactures bearing cages (in brass, steel and polyamide materials), complex and specialized precision stamped components, welded assemblies and brass castings and cages & bronze bushings; and (ii) solar EPC business, under which it provides complete comprehensive turnkey solutions to all solar photovoltaic requirements.

Overview of the Bearing cage sector

Bearings form an important part of many types of machines and are available in a variety of shapes and sizes. The primary objective of a bearing is to prevent direct contact between two elements that are in relative motion. This in turn helps to prevent the generation of heat and friction.

Rolling element bearings is a type of bearing that includes rolling components in the form of either balls or cylinders. These types of bearings aid in the free movement of parts in a rotational motion. The rolling element bearings usually consist of the following components: 1) Inner ring, 2) Outer ring, 3) Rolling elements (rollers or balls), 4) Cage and 5) Other elements of bearing apparatus. The rolling elements are trapped in between the rings and the cage holds the rolling elements in place.

Precision bearing cages form one of the five components of a bearing; other such components are, the inner ring, outer ring and rolling elements like rollers or balls and cages. It accounts for a small portion of the total cost of bearings. Bearing cages are primarily utilized to:

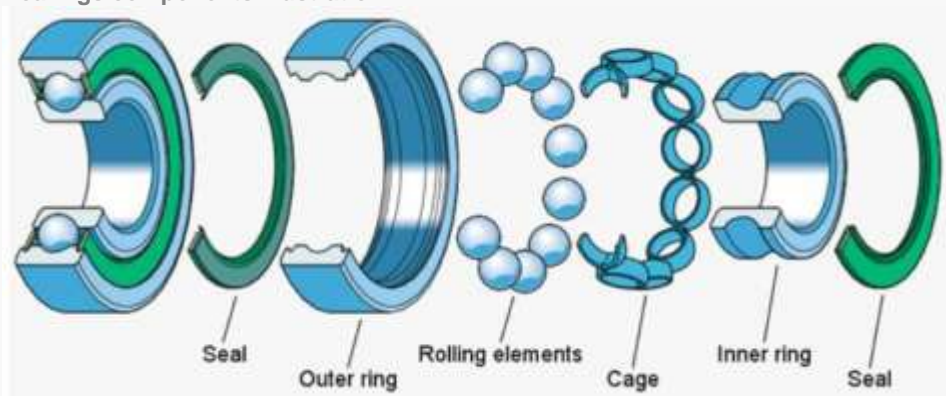
- separate the rolling elements, reducing the frictional heat generated in the bearing
- keep the rolling elements evenly spaced, optimizing load distribution on the bearing
- guide the rolling elements in the unloaded zone of the bearing
- retain the rolling elements of separable bearings when one bearing ring is removed during mounting or dismounting

The bearing cage is an important component within a bearing and requires the highest lead time and technical and tooling expertise, for its manufacture when compared to other components of a bearing.

The bearing cage category comprises roller cages and ball bearing cages and the cages offer high rigidity, strength and high heat-resistant operating conditions. Bearing cage accounts for a small portion of the total cost of a bearing and considering the complexity of the production process for such bearing cages, given the critical function of a bearing cage, and the resultant quality requirements, global bearing companies have steadily increased outsourcing manufacture of bearing cages and the business from these bearing companies has gotten concentrated to a few bearing cage manufacturers like HEIL.

The exhibit below is an illustration of bearing components:

Bearings components illustration



Source: RHP

Type-wise break up of the domestic bearings market

The total bearings market based on type can be split into ball bearings, roller bearings, bearing units and 'others' categories. Bearing units consist of a bearing mounted in a housing. Ball bearings accounted for the largest share at 43% in 2020 followed by a share of roller bearings at 34%. Bearing units and others category accounted for a share of 22% and 1% respectively.

The type-wise breakup of the bearings market	Global bearings market 2020	Indian Bearings market 2020
Ball Bearings	43%	43%
Roller Bearings	34%	34%
Others	23%	23%

Source: RHP

Applications of bearings -Sector-wise breakup

Bearing cages are part of bearings and the below table provides the sector-wise split of the applications of bearings in both the global and Indian markets. Automotive forms the highest share of the bearing application at both the global and domestic market levels, followed by aviation and railways.

Automotive: The demand for automotive bearings is being driven by increasing demand for automobiles. Further, the preference for personal mobility since the outbreak of COVID-19 will positively affect the automotive and bearings industries. Moreover, the domestic bearing industry is expected to benefit from the shifting of production facilities of global players to emerging geographies such as India. The domestic automotive bearings market is expected to grow to USD 1.9 Bn in 2029 at a CAGR of 7.4% from 2021 to 2029. **Aviation & Aerospace:** Increasing investments in defence and growing demand for high-performance bearings in aviation and aerospace is likely to positively affect the aviation and aerospace bearings industry in the country.

Railways: Growing investments in railways and thrust provided by the government on infrastructure including railways bodes well for the bearings industry.

Construction: Favorable policies introduced by the government for the development and improvement of infrastructure including affordable housing is likely to positively impact the bearings industry.

	Global Bearings market 2020	Global Bearings market 2029	Indian Bearings market 2020	Indian Bearings market 2029
Automotive	23%	22%	23%	22%
Aviation & Aerospace	20%	20%	20%	20%
Railways	18%	18%	18%	18%
Construction	14%	14%	14%	14%
Mining	11%	11%	11%	11%
Electrical & Electronics	9%	9%	9%	9%
Agriculture	6%	5%	6%	5%
Others	1%	1%	1%	1%

Source: RHP

Geography-wise break-up of the bearings market

By region, in 2020, the Asia Pacific bearings market accounted for the highest share of the total bearings market at about 40.6% followed by Europe at around 28.4% and North America at about 26.1%. Latin America and the Middle East & Africa stood at a share of 3% and 2% respectively.

Asia Pacific: With respect to revenue, the bearing market in the Asia Pacific region was valued at USD 34.2 in 2015 and grew at a CAGR of 5.9% from 2015 to 2019. It is forecasted to grow at a CAGR of 6.6% during the period 2021 to 2029 and is expected to be valued at USD 69.2 Bn in 2029. Within Asia Pacific, China accounted for the largest share at about 29.7% in 2020. Meanwhile, the revenues for the bearings market in India accounted for a share of 11.6% and the Indian bearings market is expected to grow at the highest CAGR of 7.9% amongst other countries within the Asia Pacific region from 2021 to 2029 and is estimated to be valued at USD 9 Bn in 2029.

Europe: With respect to revenue, the bearing market in the Europe region was valued at USD 24.3 Bn in 2015 and grew at a CAGR of 5.5% from 2015 to 2019. It is forecasted to grow at a CAGR of 6.2% during the period 2021 to 2029 and is expected to be valued at USD 46.7 Bn in 2029. Within Europe, the demand for bearings is expected to be driven by increasing demand from Germany, UK and France. Moreover, the growing demand for sophisticated, high-performance bearings augurs well for the European bearings market.

North America: With respect to revenue, the bearing market in the North American region was valued at USD 22.3 Bn in 2015 and grew at a CAGR of 5.6% from 2015 to 2019. It is forecasted to grow at a CAGR of 6.3% during the period 2021 to 2029 and is expected to be valued at USD 43.5 Bn in 2029. The demand for bearings in this region is being driven by high-value bearings such as customized bearing solutions that are used in heavy machinery and wind turbines. Moreover, the presence of major bearing providers in countries like the USA, Mexico and Canada is aiding the growth in demand.

Regional % breakup of the bearings market	Global (2020)	Global (2029)
Asia Pacific	40.6%	41.4%
Europe	28.4%	28.0%
North America	26.1%	26.0%
Latin America	3.0%	3.0%
Middle East & Africa	2.0%	1.5%

Source: RHP

Size of the bearing cages market

The table below illustrates the bearing market size in terms of Revenue in USD in both global and Indian markets and compares it with the global and Indian bearing cages market. In terms of revenue, the bearing cages market in India accounted for a share of about 4.7% of the global bearings cage market in 2020. The Indian bearing cages market stood at USD 186.5 million in 2015 and grew at a CAGR of 7.2% from 2015 to 2019. The Indian bearing cages market contracted in 2020 owing to the global outbreak of COVID-19 since the end of March 2020 led to a decline in demand from end-user industries of bearing cages and manufacturers witnessed supply chain constraints. However, going forward, with the resumption of economic activities, the Indian bearing cages market is expected to grow at the highest CAGR of 7.9% amongst the countries within the Asia Pacific region during 2021 to 2029 and is estimated to be valued at USD 449.6 million in 2029.

Bearing cages are usually made of materials such as Steel, Brass, Polyamide, Polyetheretherketone, Phenolic Resin etc. Bearing cage business into large diameter brass and steel bearing cages are still more concentrated house and there is likely possibility of higher outsourcing of the same going forward.

	Global bearings market	Indian Bearings market	Global bearing cages market	Indian Bearing cages market	Global stamping market	Indian Stamping market
2015A	85.2	3.7	4.26	0.19	162	8.30
2016A	90.0	4.0	4.50	0.20	169	8.80
2017A	95.1	4.3	4.75	0.21	176.5	9.30
2018A	100.4	4.6	5.02	0.23	184.4	9.90
2019A	106.1	4.9	5.31	0.25	192.9	10.50
2020A	95.5	4.5	4.78	0.23	175.5	9.60
2021F	102.2	4.9	5.11	0.24	186	10.40
2022F	112.4	5.5	5.62	0.27	201.8	11.40
2023F	118.9	5.9	5.95	0.29	211.7	12.10
2024F	125.8	6.3	6.29	0.31	222.3	12.90
2025F	133.1	6.8	6.65	0.34	233.6	13.80
2026F	140.8	7.2	7.04	0.36	245.7	14.70
2027F	149.0	7.8	7.55	0.39	258.6	15.70
2028F	157.8	8.4	7.89	0.42	272.5	16.70
2029F	167.1	9.0	8.35	0.45	287.3	17.90
CAGR 2015-19	5.6%	7.3%	5.6%	7.2%	4.5%	5.9%
CAGR 2021-29	6.3%	7.9%	6.3%	7.9%	5.6%	7.1%

Source: RHP

Growth Drivers of the Indian bearing cage market

- Favourable policy and regulatory framework
- Growing demand from end users
- Manufacturers diversifying global supply chain network
- Key enablers like advancements in technology with digitization, and the Internet of Things (IoT) will drive the demand for bearings components including cages going forward. Moreover, the bearing component manufacturers are continuously working to develop customized bearings as per end-user requirements which are likely to benefit the bearing cages manufacturers as well.

Challenges

- Volatile prices of raw materials
- Increasing EV penetration

Trade Scenario

With respect to the trade scenario of the ball or roller bearings, India remained a net importer from 2016 to 2020. India exported USD 388.7 million in the ball or roller bearings in 2016 and grew at a CAGR of 4.2% from 2016 to 2020 to USD 458 million in 2020. On the other hand, India imported USD 890.6 million in the ball or roller bearings in 2016 and grew at a CAGR of -1.6% from 2016 to 2020 to moderate to USD 834.3 million in 2020.

Overview of the stamping market

Stamping is the process of manufacturing which converts flat metal sheets into specific shapes and sizes depending on the end user's requirement. It includes several metal forming techniques such as blanking, coining, and bending, amongst others, which are used in the manufacturing process. Stamping experts also use Computer Aided Design or Computer Aided Manufacturing tools for creating different designs. There are different stamping types or techniques which can be used depending on the product. The major types of stampings are: 1) Progressive die stamping, 2) Fourslide stamping, 3) Transfer die stamping and 4) Deep draw stamping. In India, in 2020 the Automotive sector formed the largest end-user of stamping (18% Market share), followed by the electrical and electronics sector (17.1% share) and material handling (15% share). The Automotive industry was leading the Indian Stamping market in 2020 with USD 1.7 Bn in revenue. It is forecasted to reach USD 3.2 Bn in revenue by 2029, growing at a CAGR of 7% between 2021-2029.

Size of the global stamping market: The Global Stampings market grew at 4.5% CAGR between 2015 to 2019 and was valued at USD 175.5 Bn in the year 2020. It is projected to grow at a CAGR of 5.6% between 2021 and 2029 and is expected to be worth USD 287.3 Bn by 2029. The year 2020 registered a decline of 9% and the market size slipped to USD 175.5 Bn due to COVID-19 impact. However, the Stampings market is expected to rebound and grow at a 5.6% CAGR in future.

Size of the Indian stamping market: The APAC region is forecasted to be the second largest growing region in the global stampings market, in which India is estimated to lead with the highest CAGR. The Indian Stampings market grew at 5.9% CAGR between 2015 to 2019 and was valued at USD 9.6 Bn in 2020. It is forecasted to grow at a 7.1% CAGR between 2021-2029 to reach USD 17.9 Bn by 2029.

Competition

The global bearing cages market is fragmented with several global and regional companies. Some of the leading bearing cage companies which operate in the same industry as HEIL include Nakanishi Metal Works Co. Ltd. (NKC Japan), MPT Präzisionsteile GmbH Mittweida and Manu Yantralaya (P) Ltd. With the ability to provide customized and innovative solutions to global bearing players, HEIL has established a strong market share for itself in the Indian and global subcontinent in the outsourced brass, steel and polyamide segment. HEIL also has robust tooling capabilities and offers a diverse product portfolio of bearing cages with respect to size and material type. They have established a global presence, specifically in low-cost manufacturing locations, which aids their access to different markets cost-effectively.

Comparison with Listed peers

Year End Mar-22	Revenue (Rs Cr)	EBITDA (Rs Cr)	EBITDA (%)	PAT (Rs Cr)	RoAE (%)	NAV (Rs)	P/E (x)
Harsha Engineers	1,321.48	186.58	14.12%	91.94	19.13%	63.34	[•]
Timken India	2,203.24	525.14	23.83%	327.11	21.80%	220.28	69.30
SKF India	3,665.89	589.91	16.09%	394.96	22.90%	381.43	59.21
Rolex Rings	1,016.71	240.34	23.64%	131.88	29.26%	200.05	36.04
Sundram Fasteners	4,902.06	837.95	17.09%	461.83	18.49%	124.75	39.38

Source: RHP; financial information for the year ended March 31, 2022, submitted to the stock exchange, P/E Ratio has been computed based on the closing market price of the equity shares (NSE) on August 23, 2022

Financials

Profit & Loss

(Rs Cr)

Particulars	FY20	FY21	FY22
Revenue from Operations	886	874	1,321
Other Income	14	3	18
Total Income	900	877	1,339
Less :			
Cost of material Consumed	448	434	799
Changes in inventory	10	-19	-59
Employee Benefits Expense	149	146	158
Other Expenditure	193	191	255
Total Cost	800	752	1,152
EBITDA	100	125	187
EBITDA %	11	14	14
Depreciation & amortization	35	34	35
EBIT	64	91	151
Finance Costs	33	30	25
Profit before exceptional items	32	61	127
Exceptional Items	0	0	0
Profit Before Tax	32	61	127
Tax Provision	10	15	35
Profit after Tax	22	45	92
Other comprehensive Income	-6	5	1
Total Comprehensive income for the year	15	51	93
EPS (Rs)	6	9	16

Source: RHP

Balance Sheet
(Rs Cr)

Particulars	FY20	FY21	FY22
Non-Current Assets			
Property plant and equipment	262	268	283
CWIP	3	3	2
Goodwill	70	73	71
Other Non-Current Assets	20	20	22
Total non-current assets	356	364	378
Current Assets			
Inventories	232	268	376
Investment	7	9	6
Trade receivables	239	214	283
Cash equivalents & Other Bank bal	57	45	39
Other Current Assets	83	81	76
Total Current Assets	618	617	780
Total assets	973	981	1158
Equity			
Equity Share Capital	50	50	77
Other Equity	322	377	445
Non-Controlling Interest	0	0	0
Total Equity	372	427	522
Liabilities			
Non-current liabilities			
Financial liabilities			
Borrowings	128	102	138
Lease Liabilities	6	8	6
Deferred Tax Liabilities(Net)	-15	2	4
Other non-Current Liabilities	9	12	13
Total non-current liabilities	128	123	161
Current liabilities			
Borrowings	284	247	241
lease Liabilities	1	1	1
Trade Payables	111	117	183
Other Current liabilities & provisions	77	67	52
Total current liabilities	473	431	476
Total liabilities	601	554	636
Total equity and liabilities	973	981	1158

Source: RHP

Cash Flow
(Rs Crs)

Particulars	FY20	FY21	FY22
Pre Tax Profit	32	61	127
Add: Depreciation	35	34	35
Add: Finance Cost	33	30	25
Less: Interest Income	-3	-2	-2
Change in other assets & liabilities	0	2.0	4.1
Op Profit Before W Cap/Other Changes	97	125	189
Adj. for (inc)/decrease in operating asset	60	-8	-173
Adj. for (inc)/decrease in operating liabilities	-30	6	52
Cash (used in) / generated from operations	126	122	68
Less: Tax Paid	-13	-1	-31
Cash Flow from Operations (A)	113	121	36
Purchase of Fixed Assets (Net)	-73	-40	-50
Change in other investments	-1	-3	3
Loans and Advances /others	7	20	-7
Add: Interest Income	3	2	2
Cash Flow from Investing (B)	-65	-20	-52
Dividends Paid (incl. DDT)	-10	0	0
Finance Cost	-33	-30	-25
Changes in borrowings (net)	4	-62	28
Changes in Non-Current Liability	0	0	0
Cash Flow from Financing (C)	-38	-92	4
Net Cash Flow (A)+(B)+(C)	10	9	-12
Cash at the beginning	1	24	33
Add : Merger Adj.	13	0	0
Cash at the end	24	33	21

Source: RHP

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