

Issue highlights

- ❑ **Harsha Engineers International Limited ("HEIL")** was incorporated on December 11, 2010. The part of Harsha Group, HEIL is a leading engineering company that offers diversified suite of products across geographies and end-user industries. It manufactures brass, steel and polyamide cages and stamped components with production facilities located in Asia (India & China) and in Europe (Romania).
- ❑ HEIL's market share is estimated to be around ~50-60% in the Indian bearing cages market making it the largest manufacturer of precision bearing cages in organized sector in India in terms of revenues and amongst the leading manufacturers of precision bearing cages in the world. HEIL accounted for a share of 6.5% in the global organized bearing brass, steel and polyamide cages market in CY2021.
- ❑ Company's business comprises:
 - **Engineering business**, under which HEIL manufactures bearing cages (in brass, steel and polyamide materials), complex and specialised precision stamped components, welded assemblies and brass castings and cages & bronze bushings; and
 - **Solar EPC business**, under which HEIL provides complete comprehensive turnkey solutions to all solar photovoltaic requirements
- ❑ They offer a wide range of bearing cages starting from 20 mm to 2,000 mm in diameter and their bearing cages find its application in the automotive, railways, aviation & aerospace, construction, mining, agriculture, electrical and electronics, renewables sectors etc.
- ❑ HEIL has also been providing comprehensive complete turnkey solutions to all Solar Photovoltaic requirements.
- ❑ HEIL has 4 strategically located manufacturing facilities for their engineering business with one of their principal 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.

Brief Financial Details*

(₹ In Cr)

	As at Mar' 31,		
	2022	2021	2020
Equity Share Capital	77.25	50.00	50.00
Reserves	444.61	377.18	321.98
Net worth as stated	527.90	433.22	378.02
Revenue from Operations	1,321.48	873.75	885.85
Revenue Growth (%)	51.24%	(1.37)%	-
EBITDA as stated	186.58	124.96	100.06
EBITDA Margin (%) as stated	14.12%	14.30%	11.29%
Profit/Loss Before Tax	126.62	60.72	31.59
Net Profit for the period	91.94	45.44	21.91
Net Profit (%) as stated	6.87%	5.18%	2.44%
EPS - Basic (₹)	16.06	9.09	6.26
EPS - Diluted (₹)	11.90	5.88	3.52
RONW (%)	17.42%	10.49%	5.80%
Net Asset Value (₹)	68.34	86.64	75.60

Source: RHP *Restated consolidated; Net profit % on Total Income

Issue Details

Fresh Issue of Equity shares aggregating upto ₹ 455 Cr and Offer for sale of Equity Shares aggregating upto ₹ 300 Cr

Issue summary

Issue size: ₹ 755 Cr

No of shares: 24,053,265- 22,886,595 Shares

Face value: ₹ 10/-

Employee Reservation: ₹ 2.50 Cr

Price band: ₹ 314 - 330

Bid Lot: 45 Shares and in multiple thereof

Employee Discount: ₹ 31/- per share

Post Issue Implied Market Cap =

₹ 2,881 – 3,005 Cr

BRLMs: Axis Capital, Equirus Capital, JM Financial

Registrar: Link Intime India Pvt. Ltd.

Issue opens on: Wednesday, 14th Sep'2022

Issue closes on: Friday, 16th Sep'2022

Indicative Timetable

Activity	On or about
Finalisation of Basis of Allotment	21-09-2022
Refunds/Unblocking ASBA Fund	22-09-2022
Credit of equity shares to DP A/c	23-09-2022
Trading commences	26-09-2022

Issue break-up

	No. of Shares		₹ In Cr	% of Issue
	@Lower	@upper		
QIB	11,982,420	11,401,470	376.25	50%
NIB	3,594,780	3,420,450	112.88	15%
RET	8,387,730	7,981,065	263.38	35%
EMP	88,335	83,610	2.50	-
Total	24,053,265	22,886,595	755.00	100%

Listing : BSE & NSE

Shareholding (No. of Shares)

Pre issue	Post issue [~]	Post issue [^]
77,248,410	91,747,545	91,044,105

[~]@Lower price Band [^]@ Upper Price Band

Shareholding (%)

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

BACKGROUND

Company and Directors

The company was incorporated on December 11, 2010. The company is the part of the Harsha Group which was established in 1986 and has over 35 years of operating history in the engineering business. Rajendra Shah, Harish Rangwala, Vishal Rangwala and Pilak Shah are the Promoters of the company and are in control of day-to-day affairs of the company. Currently, the promoters hold 44,360,749 Equity Shares, equivalent to 57.43% of the pre-Offer issued, subscribed and paid-up Equity Share capital of the company.

Brief Biographies of Directors

Rajendra Shah is the Promoter, Chairman and Whole-time Director of the company. Currently, he looks after overall management of the company, particularly all financial matters. He has over 35 years of experience in the precision engineering business for bearing cages and stamped components.

Harish Rangwala is the Promoter, Managing Director of the company. Currently, he looks after overall management of the company along with Renewable energy division. He has over 35 years of experience in the precision engineering business for bearing cages and stamped components.

Vishal Rangwala is the Promoter, Chief Executive Officer and Whole-time Director of the company. He is responsible for the overall strategic directions for the Harsha group and is currently leading marketing and corporate functions. He has over 13 years of experience in the precision engineering business for bearing cages and stamped components.

Pilak Shah is the Promoter, Chief Operating Officer and Whole-time Director of the company. He is responsible for the overall strategic directions of the Harsha Group. He has over 13 years of experience in the precision engineering business for bearing cages and stamped components.

Hetal Ukani is a Whole-time Director of the company. She has been associated with the company since 2015. She is responsible for Health and Safety of all employees and others who may be affected by the company's operations. She also plays a vital role in managing TPM function of the company.

Neharika Vohra is the Independent Director of the company. She has over 22 years of experience in teaching and research in the field of organizational behaviour.

Ambar Patel is the Independent Director of the company. He has served as the managing director of Shilp Gravures Limited since October 29, 1993. He is the Director on Board of The Kalupur Commercial Co-Op Bank Ltd. and Chairman of MSME committee of the said bank.

Kunal Shah is the Independent Director of the company. He is associated with AIA Engineering Ltd since December 2002. He was their CFO from 2014 to 2017 and is currently their Executive Director, Corporate Affairs. He has an overall general management and financial experience.

Bhushan Punani is the 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 the Independent Director of the company. Previously, he has worked at ACT India, Johnson & Johnson Limited, Best & Crompton Engineering Ltd, SKF India Ltd and Hindustan Zinc Ltd. He is currently associated with Nexdigm Pvt Ltd as a consultant.

Key Managerial Personnel

Maulik Jasani is the Vice President – Finance and Group CFO of the company with effect from December 25, 2021. He has over 17 years of experience in accounting and finance. Prior to joining the company, he has been associated with Cadila Healthcare Ltd, Delhi Assam Roadways Corp Ltd and Mukesh M. Shah & Co, Ahmedabad. He was also associated with Biotech Vision Care Pvt Ltd as the chief financial officer.

Kiran Mohanty is associated with the company from July 1, 2015 (in his capacity as Whole-time Secretary of Harsha Engineers Ltd, which has currently merged into the company) was appointed as the Company Secretary and the Chief Compliance Officer of the company with effect from August 12, 2021. He has over 13 years of experience as a company secretary. Prior to joining the company, he has been previously associated with Claris Injectables Ltd, John Energy Ltd, Sanghvi Forging and Engineering Ltd and Siemens Healthcare Diagnostic Ltd.

OBJECTS OF THE ISSUE

Objects	Amount (₹ Cr)
• Pre-payment or scheduled repayment of a portion of the existing borrowing availed by the company;	270.00
• Funding capital expenditure requirements towards purchase of machinery;	77.95
• Infrastructure repairs and renovation of the existing production facilities including office premises in India;	7.12
• General Corporate Purposes	[•]
Total	[•]

Proposed schedule of Implementation and Deployment of Funds

	Total Estimated Amount	Amount proposed to be funded from the Net Proceeds	Estimated Utilisation of Net Proceeds	
			Fiscal 2023	Fiscal 2024
• Pre-payment or scheduled repayment of a portion of the existing borrowing availed by the company	N.A.	270.00	270.00	-
• Funding capital expenditure requirements towards purchase of machinery	77.95	77.95	49.51	28.44
• Infrastructure repairs and renovation of the existing production facilities including office premises in India	7.12	7.12	7.12	-
• General Corporate Purposes	[•]	[•]	[•]	[•]
Total	[•]	[•]	[•]	[•]

OFFER DETAILS

Fresh Issue	₹ Cr	No. of Shares	Average cost of acquisition per Equity Share (₹)
<i>Fresh Issue</i>	₹ 455 Cr	Upto 14,499,135 [~] - 13,795,695 [^] Equity Shares	-
The Offer for Sale by:	(₹ 300 Cr)	Upto 9,554,130[~] - 9,090,900[^] Equity Shares	
The Promoter Selling Shareholder:			
<i>Harish Rangwala</i>	₹ 75.00	Upto 2,388,533 [~] - 2,272,725 [^] Equity Shares#	10.85
<i>Rajendra Shah</i>	₹ 66.75	Upto 2,125,794 [~] - 2,022,725 [^] Equity Shares#	6.04
<i>Pilak Shah</i>	₹ 16.50	Upto 525,475 [~] - 499,998 [^] Equity Shares#	14.32
The Promoter Group Selling Shareholders:			
<i>Charusheela Rangwala</i>	₹ 75.00	Upto 2,388,533 [~] - 2,272,725 [^] Equity Shares#	1.85
<i>Nirmala Shah</i>	₹ 66.75	Upto 2,125,795 [~] - 2,022,726 [^] Equity Shares#	3.10

([~] at lower price band and [^] upper price band); # shares are rounded/adjusted to the nearest.

SHAREHOLDING PATTERN

Shareholders	Pre-offer		No. of Shares offered*	Post-offer	
	Number of Equity Shares	% of Total Equity Share Capital		Number of Equity Shares	% of Total Equity Share Capital
<i>Promoters</i>	44,360,749	57.43%	4,795,449	39,565,300	43.46%
<i>Promoters Group</i>	32,656,684	42.27%	4,295,451	28,361,232	31.15%
Total for Promoter & Promoter Gr	77,017,433	99.70%	9,090,900	67,926,533	74.61%
<i>Public</i>	230,977	0.30%	-	23,117,572	25.39%
Total for Public Shareholder	230,977	0.30%	-	23,117,572	25.39%
Total Equity Share Capital	77,248,410	100.00%	9,090,900	91,044,105	100.00%

* at [^] upper price band and rounded/adjusted to the nearest

BUSINESS OVERVIEW

Harsha Engineering International Limited (“HEIL”) is the largest manufacturer of **precision bearing cages**, in terms of revenue, in organised sector in India, and amongst the leading manufacturers of precision bearing cages in the world. HEIL offers diversified suite of precision engineering products across geographies and end-user industries.

Company’s business comprises:

- **Engineering business**, under which HEIL manufactures bearing cages (in brass, steel and polyamide materials), complex and specialised precision stamped components, welded assemblies and brass castings and cages & bronze bushings; and
- **Solar EPC business**, under which HEIL provides complete comprehensive turnkey solutions to all solar photovoltaic requirements.

HEIL has approximately 50-60% of the market share in the organised segment of the Indian bearing cages market and 6.5% of the market share in the global organised bearing cages market for brass, steel and polyamide cages in CY 2021. They offer a wide range of bearing cages starting from 20 mm to 2,000 mm in diameter and their bearing cages find its application in the automotive, railways, aviation & aerospace, construction, mining, agriculture, electrical and electronics, renewables sectors etc.

HEIL is a technology driven company with a strong focus on quality, design and tool development, which has allowed them to develop products suited to their customers’ requirements. They have the expertise to design and develop advance tooling in-house which enables them to manufacture precision bearing cages and complex and specialised precision stamped components. Bearing cages are critical parts of a bearings and it requires high precision technology to manufacture them. HEIL, which housed a team of 253 qualified engineers (including solar EPC business) as of March 31, 2022, along with their decades of experience in bearing cages engineering, enable them to develop specialized products and solutions. Their ability to develop products suited to their customers’ requirements has fostered strong and long-term customer relationship which in turn has helped them gain higher margins for their products and better navigate competition. Further, they have been successful in diversifying their product portfolio and improve their current processes in different types of bearing cages mainly due to their design, development and technological capabilities. As of March 31, 2022, they have been able to manufacture more than 7,205 bearing cages and more than 295 other products for customers in the automotive, railways, aviation & aerospace, construction, mining, agriculture, electrical and electronics, renewables sectors, allowing them to meet changing customer requirements. In addition, over the past 3 years their product development and innovation center has developed more than 1,200 products in different bearing types.

They have been able to leverage their tooling capabilities and the expertise developed in the stamping employed for manufacture of steel cages to diversify and grow their stamping components business. It also provides comprehensive metal stamping solutions ranging from simple to complex designs and geometries to their clients in automotive; bearing and sealing; and electrical and appliance industry. Their capability extends to manufacturing high quality precision components as well as semi assembled modular units. They have recently expanded their 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. While the automotive segment is shifting towards the electric vehicles, the impact on them will be limited as they are not manufacturing needle bearings cages which are engine components. Needle cages bearing used in engines and small cage bearing used in two and three wheelers are likely to be the most impacted type of bearings due to increasing penetration of electric vehicles. Further, the electrification of vehicles will increase the precision requirements sought by customers which will help companies like HEIL to further improve their market share in the sector.

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. Given the critical function of a bearing cage, and the resultant quality requirements, global bearing companies have steadily increased outsourcing for manufacturing of bearing cages and the business from these bearing companies has gotten concentrated to a few bearing cage manufacturers including them. HEIL has established strong customer relationship with leading global bearing manufacturers in the automotive, railways, renewable energy, and other industrial sectors. Additionally, they have been involved by their key customer groups in their product development process from the design stage and accordingly, they have been able to ensure repeat orders from their customers. Each of their Top-5 customer groups (excluding customers’ contributing to revenue from scrap sales) have been their customers for over a decade. Their long-term relationship with customers is indicative of their quality consciousness, cost efficiency and design, tooling and technological capabilities.

Details of contribution from Top-5 customer groups (excluding customers' contributing to revenue from scrap sales):

Particulars	Fiscal 2022		Fiscal 2021		Fiscal 2020	
	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue
Top-5 Customers	932.34	70.55%	631.57	72.28%	642.63	72.54%

HEIL has 4 strategically located manufacturing facilities for their engineering business with one of their principal 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.

These 4 strategically located manufacturing facilities spread across 3 countries in India, China, and Romania. As on March 31, 2022, their aggregate installed capacity across these manufacturing facilities was 4,596 MTPA for castings and 1,097.87 million pieces p.a. for bearing cages.

HEIL supply products to customers in over 25 countries covering 5 continents i.e., North America, Europe, Asia, South America and Africa. To help them meet 'just in time' requirements of their customers, they have entered into arrangements to stock inventory in warehouses spread across more than 20 locations across the world including in, Europe, US, China and South America. Their multinational presence has also allowed them to diversify their revenue geographically.

Their facilities have end-to-end manufacturing capabilities, strong engineering and design capabilities, and the ability to supply to their global customer base. All their manufacturing facilities offer fungibility within the product groups. Their manufacturing units in India, China and Romania have been duly certified for conforming to and applying international standards of quality management systems and they have comprehensive tooling, testing and measurement infrastructure at their Indian and Romanian manufacturing units. They have also been awarded a number of industry awards including "TPM Excellence-Award for excellence in consistent TPM commitment-2018" by Japan Institute of Plant Maintenance", "Excellence in Delivery-2019" by Timken and "Gold Rating National 5 S Excellence Awards-2019" from Confederation of Indian Industry in the year 2019.

HEIL is part of the Harsha Group which was established in 1986 and has over 35 years of operating history in the engineering business. The company, Harsha Engineering International Limited, was incorporated in 2010 as Harsha Abakus Solar Pvt Ltd. In order to consolidate the Harsha Group's India engineering and solar EPC business, and to get the benefits of synergies, a corporate reorganisation was recently completed effective from the appointed date of April 01, 2020. Pursuant to the Corporate Reorganisation, the engineering business of the Harsha Group housed in Aastha Tools Pvt Ltd, Harsha Engineers India (Pvt) Ltd and Harsha Engineers Ltd was amalgamated into the company.

Company's founder Promoters, Harish Rangwala and Rajendra Shah, have more than 35 years of experience in the precision engineering and bearing cages manufacturing sector and have played a pivotal role in their innovation, success and growth. Additionally, their second generation Promoters, Vishal Rangwala and Pilak Shah, are also involved in the overall operations, strategies and business of the company.

HEIL is also an EPC service provider in the solar photovoltaic industry and also provides operations and maintenance services in the solar sector. They have over 10 years of operating history in the solar EPC business. They have an in-house design, engineering, procurement, project management and O&M team which has a combined experience of installing at least 500 MW and more than 60 MW commissioning experience in roof top segment as of March 31, 2022. The revenue from solar EPC business aggregated to ₹ 82.95 crore, ₹ 54.19 crore, and ₹ 64.19 crore for Fiscals 2022, 2021 and 2020, respectively, constituting 6.28%, 6.20%, and 7.25% respectively, of the total revenue from operations, as per the Restated Consolidated Financial Statements.

HEIL has 3 wholly owned subsidiaries, one in China - Harsha Precision Bearing Components (China) Co. Ltd, one in the United States of America - HASPL Americas Corporation and one in the Netherlands - Harsha Engineers B.V., and a step-down subsidiary in Romania - Harsha Engineers Europe SRL. The company also has a 50% interest, as a partner, in Clenmax Harsha Solar LLP and 26% equity interest in Sunstream Green Energy One Pvt Ltd (formerly known as Eirene Naval Systems Pvt Ltd).

REVENUE FROM OPERATIONS

The revenue from operations from engineering business (from India and outside India), in absolute terms and as a percentage of total revenue from operations:

Particulars	Fiscal 2022		Fiscal 2021		Fiscal 2020	
	Restated		Restated		Restated	
	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue
India	401.90	30.41%	235.07	26.90%	258.52	29.18%
Outside India	836.63	63.31%	584.49	66.89%	563.14	63.57%
Total	1,238.54	93.72%	819.56	93.80%	821.66	92.75%

* The revenue information above is based on the location of the customers

KEY FINANCIAL METRICS

(₹ Cr, except percentage)

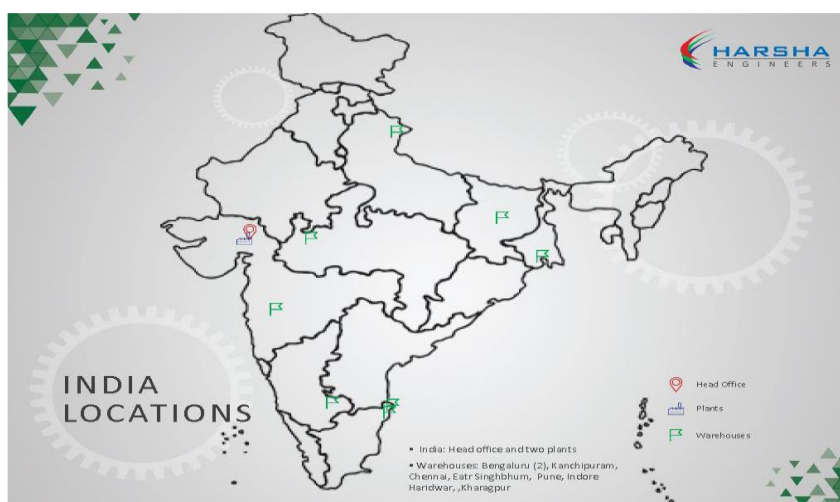
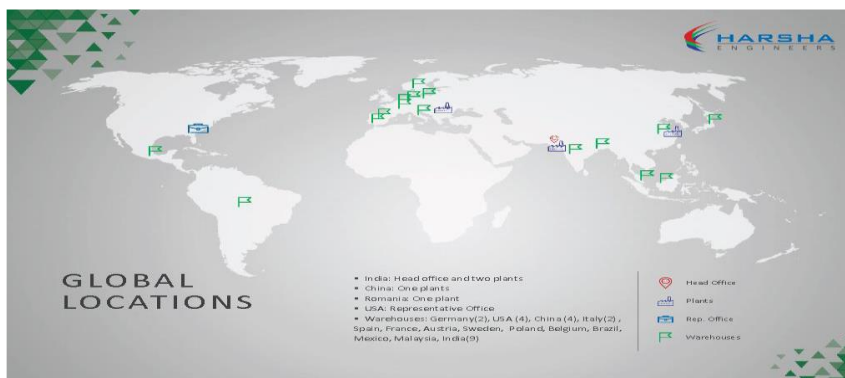
Product Name	Fiscal 2022	Fiscal 2021	Fiscal 2020
	(Restated)	(Restated)	(Restated)
Free cash flow to firm	(25.26)	59.94	37.98
Net Debt	356.59	322.08	393.10
RoACE	24.92%	17.24%	18.05%
RoAE	19.13%	11.20%	6.10%
Ratio of EBITDA to net cash flow generated from operating activities	5.12	1.03	0.89
Net Debt to Net Worth	0.68	0.74	1.04
Ratio of Net Debt to EBITDA	1.91	2.58	3.93
FCFF to EBITDA ratio	(0.14)	0.48	0.38
FCFF to PAT ratio	(0.27)	1.32	1.73
Fixed Asset Turnover Ratio – Consolidated	4.64	3.24	3.36

Segment-wise details

(₹ Cr)

Segment	Fiscal 2022	Fiscal 2021	Fiscal 2020
	(Restated)	(Restated)	(Restated)
Segment Revenues:			
Engineering & Others	1,238.54	819.56	821.66
Solar-EPC and O&M	82.95	54.19	64.19
Total Revenue from Operations	1,321.48	873.75	885.85
Segment Operating Results (EBITDA):			
Engineering & Others	189.09	140.46	123.38
Solar-EPC and O&M	(2.51)	(15.50)	(23.32)
Total Operating Results (EBITDA)	186.58	124.96	100.06
Segment Results (PBT):			
Engineering & Others	131.38	86.51	64.25
Solar-EPC and O&M	(4.76)	(25.79)	(32.66)
Total Profit Before Tax (PBT)	126.62	60.72	31.59
Segment Assets:			
Engineering & Others	1,047.85	882.81	816.00
Solar-EPC and O&M	110.40	98.26	157.24
Total Assets	1,158.25	981.07	973.24
Segment Liabilities:			
Engineering & Others	522.33	440.48	447.54
Solar-EPC and O&M	114.06	113.41	153.72
Total Liabilities	636.39	553.89	601.26

NATIONAL AND INTERNATIONAL REACH



The revenue break-up from different jurisdiction for the Engineering business:

Region	Fiscal 2022		Fiscal 2021		Fiscal 2020	
	Restated		Restated		Restated	
	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue
Europe	500.63	37.88%	342.58	39.21%	341.16	38.51%
India	401.90	30.41%	235.07	26.90%	258.52	29.18%
China	172.64	13.06%	131.86	15.09%	114.85	12.96%
America	82.34	6.23%	62.20	7.12%	64.14	7.24%
Other	81.02	6.13%	47.85	5.48%	43.00	4.85%
Total	1,238.54	93.72%	819.56	93.80%	821.66	92.74%

COMPANY PRODUCTS



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

Bearing Cages

The bearing cage category comprises of roller cages and ball bearing cages. The cages offer high rigidity, strength and high heat resistant operating conditions.

HEIL manufactures precision bearing cages that forms one of the 5 components of a bearing; other such components being, the inner ring, outer ring and rolling elements like rollers or balls and cages. Bearing cages are primarily utilized to: (i) separate the rolling elements, reducing the frictional heat generated in the bearing; (ii) keep the rolling elements evenly spaced, optimizing load distribution on the bearing; (iii) guide the rolling elements in the unloaded zone of the bearing; and (iv) retain the rolling elements of separable bearings when one bearing ring is removed during mounting or dismounting.

HEIL caters to the bespoke needs of their customers, by customizing the type of base material, as well as the design to be applied for the bearing cages. Such customization is generally dependent upon the operating conditions under which the bearings will be generally utilized by their customers.

While bearing cages can be manufactured using various materials, HEIL 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. Their dedicated product development and innovation centre and tool production facilities is at Changodar Plant. Over the past 5 years, the product development and innovation centre has developed more than 7,500 types of products for different bearing cage and stamping divisions.

Steel Cages:

HEIL offers various grades of steel cages as per the requirements of their customers. Owing to the lightweight nature, friction less wear and high strength, such steel cages are widely in demand. The size of the steel cages ranges upto 1,000 mm and HEIL manufactures more than 3,700 types of steel cages. Steel bearing cages can be used at operating temperatures of up to 300 °C (570 °F).

Brass Cages:

HEIL 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. Brass bearing cages can be used at temperatures of up to 250 °C (480 °F).

- **Polyamide Cages:**

HEIL offers injection moulded polyamide cages. The features of such cages include being corrosion resistant and light in weight owing to presence of high polymers materials. HEIL manufactures more than 80 types of polyamide cages with size ranging upto 300 mm including thrust ball bearings, cylindrical roller thrust bearings, linear ball bearings, water pump bearings and other special types of bearings.

Bearing cages are made in different designs depending on their operating conditions.

- **Cylindrical roller bearing cages** - Designed for radial load carrying capability, which demand high stiffness and high accuracy. Primarily used in industrial machines, pumps, compressors, OEMs and traction motors for railways.
- **Spherical Roller Bearing Cages** - Designed for carrying radial load and combined load applications which allows tolerance for misalignment in operation. Primarily used in crushers, railways, steel mills, thermal turbines and windmills.
- **Deep Groove Bearing Cages** - Designed for high speed and high running accuracy with low friction and noiseless operation. Primarily used in agricultural machines, automotive parts, chemical machinery, utilities and white appliances.

- **Angular Contact Ball Bearing Cages** - Designed for carrying axial and combined loads with high running accuracy. Primarily used in agricultural machines, chemical machinery, general industries and utilities.
- **Thrust Roller Cages** - Designed for carrying axial loads which demand high running accuracy and bearing arrangements. Primarily used in blowout preventers, extruders, gearboxes, offshore drilling and oil rigs.
- **Taper Roller Cages** - Designed for combined axial and radial load applications with demand high accuracy. Primarily used in engine applications.
- **Bronze Bushes for Sliding bearing**

HEIL has diversified in producing bronze bushes for sliding bearing. These bushes are predominantly used in the gear boxes for Wind turning in Planetary Axels. Within bronze HEIL is developing competences for multiple bronze alloys namely Aluminium and Tin Bronze. These Bushes require high precision machining and assurance of all mechanical, chemical, dimensional and cleanliness properties because of the criticality of application.

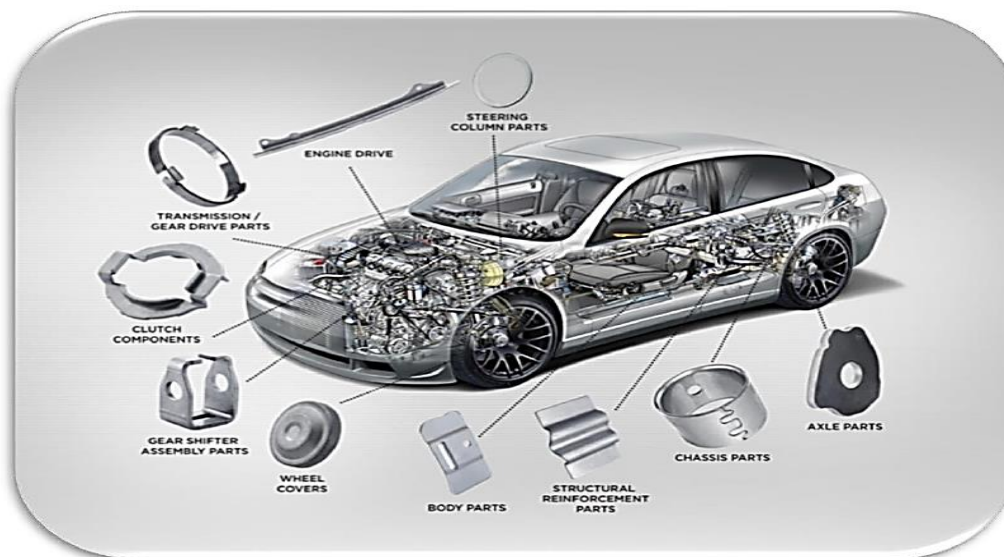
HEIL manufactures semi-finished brass castings for their customers who, in turn carry out processes for converting such semi-finished brass castings into a bearing cage. Majority of such semi-finished brass castings are manufactured by their Step-down Subsidiary in Romania.

- **Specialty Components**

HEIL plans on capitalizing on the existing niche low volume high value products in the stamping and special component segment and continue to gradually scale up its business over next 3 to 5 years. They plan to continue manufacturing specialized parts/components and supplying to auto component assembly manufacturers. Currently, they provide comprehensive metal stamping solutions ranging from simple to complex designs and geometries. Precision stamping components generally have the following applications:

- **Automotive applications:** HEIL offers their customers high quality precision parts for 2-wheeler and 4-wheeler application as well as complete assembled modular units. They also manufacture steering, column parts, engine drive, transmission/gear drive parts, clutch components, gear shifters assembly parts, wheel covers, structural reinforcements, chassis parts and axle parts.

An indicative pictorial representation:



- **Industrial applications** – HEIL is a metal insert supplier for different metal and sealing applications that are primarily used as dust covers, bearing covers, slingers, flingers and seal inserts; One specific example is metal inset used in railway bearing seal application.
- **Electrical and appliance applications** – HEIL offers high quality stamping products for electrical and appliance industry. One specific example is AC compressor Head and base cover welded assembly supplied to leading appliance compressor manufacturer. Further, they have the capability electrical switch gear, demonstrating a unique ability to streamline the production of even the smallest, most complex electronic stampings, while ensuring complete accuracy and cost efficiency.

MANUFACTURING UNITS

HEIL has a total of four production units for their engineering business. Their production units in India have availability for water and electricity by way of connections with local municipal facilities. Additionally, in order to maintain steady flow of electrical power and to protect against power surges, their production facilities are equipped with stand-by electricity facilities in form of external generators. Their production units in Changodar and Moraiya are equipped with roof top solar plant in addition to a separate windmill and ground mounted solar.

The manufacturing units at Changodar and Moraiya, have received various certifications such as ISO 9001:2015, ISO 14001:2015 from the International Organization for Standardization and IATF 16949 from International Automotive Task Force, their manufacturing unit at Romania has received the ISO 9001:2015, ISO 14001:2015 and ISO 45000: 2018 from the International Organization for Standardization and the manufacturing unit at China has received the ISO 9001:2015 from the International Organization for Standardization and IATF 16949 from the International Automotive Task Force.

Installed Capacity and capacity utilisation:

Location	As of, and for the period ended, March 31,								
	2022			2021			2020		
	Installed Capacity (MP)	Production Volume (MP)	Capacity utilization (%)*	Installed Capacity (MP)	Production Volume (MP)	Capacity utilization (%)*	Installed Capacity (MP)	Production Volume (MP)	Capacity utilization (%)*
Bearing Cages									
India	1,086.52	670.58	61.72%	1,074.95	542.15	50.43%	1,069.53	557.00	52.08%
China	11.20	7.09	63.30%	11.20	5.33	47.59%	11.19	4.83	43.16%
Romania	0.15	0.12	80.00%	0.15	0.12	80.00%	0.15	0.08	53.33%
Total	1,097.87	677.79	61.74%	1,086.30	547.60	50.41%	1,080.87	561.91	51.99%
Casting									
Romania	4,596.00	2,865.00	63.35%	4,596.00	2,022.00	44.00%	4,596.00	2,614.00	54.41%
Total	4,596.00	2,865.00	63.35%	4,596.00	2,022.00	44.00%	4,596.00	2,614.00	54.41%

Note: The increase in installed capacity, as mentioned above, is due to addition of machineries and/or technical upgradation of existing machineries to improve capacity.

** Capacity utilization has been calculated basis the actual production in the relevant Fiscal/ period divided by the available capacity available for the relevant Fiscal/ period.*

COMPETITIVE STRENGTHS

- **Comprehensive solution provider offering diversified suite of precision engineering products across geographies and end-user industries**

Within their diversified product portfolio, HEIL 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 specialised precision stamped components, welded assemblies and brass castings and bushings. Since their incorporation, they have manufactured more than 7,500 types of products in the automotive and industrial segments. They manufacture bearing cages in brass, steel and polyamide which represents 6.5% of the global organised outsourced bearing (brass, steel & polyamide) cages market in CY 2021.

They have recently expanded their 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. Their products find application across automotive, aviation and aerospace, construction, mining, agriculture, electricals and electronics, renewables sectors.

- **Long standing relationships with leading clientele**

HEIL has established strong relationship with their customers who are leading global bearing manufacturers in the automotive, railways, aviation & aerospace, construction, mining, agriculture, electrical and electronics, renewables sectors. The bearing cages market globally is concentrated among a few global bearing manufacturers with Top-6 global bearing manufacturers contributing to 54% of the market share in Fiscal 2022.

As of March 31, 2022, HEIL supply to each of the Top-6 global bearing manufacturers. Their Top-10 customers contributed to 44.70%, 48.24%, and 47.79% of their total revenue from operations for Fiscal 2022, Fiscal 2021 and Fiscal 2020, respectively. The average age of their relationship with their Top-5 customer groups spans more than a decade.

Their key customer groups are also key global bearing manufacturers who have been their customers for over a decade. Their customer-centric approach and continuous effort on transparent dealings has allowed them to enter into long term framework agreements with leading key global bearing manufacturers. They have partnered with certain of their key customer groups in the product development process, enabling their products to meet the exact specifications provided by the customers.

- ***Strategically located domestic and international production facilities and warehouses***

Company's presence in the present locations helps them overcome significant entry barriers in comparison with their competitors, allowing them to penetrate these markets more efficiently and becoming a local supplier to leading key global bearing players. Their presence in these strategic locations help them penetrate global markets more efficiently and, in a cost effective, manner. It also gives them the ability to cater to the needs of their customers from multiple locations, at times designing products at one location while manufacturing them at another. Their dual-shore capabilities, which is their ability to carry out design, engineering and manufacturing of products at different locations allow them to service customer requirements from alternate locations, giving the customer the benefit of regular supply and cost-competitive manufacturing operations.

Additionally, they have entered arrangements to stock inventory in warehouses over 20 locations across the world. Their multinational presence has also allowed them to diversify their revenue geographically and enhanced their reputation which results in higher orders from India.

- ***Expertise in Tooling, design development and automation***

HEIL 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 their global customers. They employ machining as well as stamping processes in their manufacturing process.

HEIL currently manufactures a wide range of precision automotive and industrial components with size upto 2,000 mm in diameter. They have comprehensive tooling, testing and measurement infrastructure and independent tool designing capabilities at both their units in India as well as their production unit in Romania that has allowed them to successfully diversify their products portfolio and improve their current processes in different type of bearing cages.

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. 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 including HEIL.

- ***Consistent track record of growth and financial performance***

Company's focus on operational and functional excellence has contributed to their track record of healthy financial performance. Their strong financial performance reflects the efficacy of the manufacturing and supply-chain management protocols that they have implemented while their steady operating cash flows enable them to meet the present and future needs of their customers and develop new value-added products.

- ***Strong, experienced and dedicated senior management team and qualified workforce***

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

KEY BUSINESS STRATEGIES

- ***Enhance market leadership in bearing cages and expanding the customer base***

The expected growth in 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 billion in the year 2029. Keeping pace with the market trends, HEIL has started to expand their business into large diameter brass and steel bearing cages. Currently, for such large size brass and steel bearing cages in-house production by bearing companies is quite high considering the complexity of the production process.

They aim at further expanding their customer base in China as they are considered a versatile and consistent player in the bearing cages segment in China. They have built new unit in Changhsu, Jiangshu province, China in 2019 where they consolidated a greenfield unit established in 2010 and subsequent plant acquired in 2014. With the setting up of this new unit in China and the continued support of technical and tooling services from the Indian production facilities, their aim is to focus on increased business from key Chinese customers.

They intend to further expand into the Japanese bearing market by supplying directly to their Japanese customers at their locations in Japan. In the past, they have been supplying to Japanese customers at their locations in India and to their locations outside of Japan. They have recently started supplying products directly to their locations in Japan.

Initially, the plant at Romania was manufacturing only brass casting and cages. With the takeover of Harsha Engineers Europe SRL, Romania, formerly known as Johnson Metall S.A., they have expanded their product portfolio to include bronze bushes. With the strengthening of the marketing and management team at Romania, they have started catering to additional European customers. They also intend to leverage their European presence to grow their India business share in Europe.

- ***Retain and strengthen the technological leadership through continued focus on development and automation.***

HEIL is a technology driven company focused on using appropriate cost-effective technologies for different volumes and varieties of products. They intend to digitalize their operations by implementing IoT system to connect the relevant machines or equipment and improve the operational process performance of their machines or equipment by having the right analysis of downtime or reasons for loss of productivity. They plan to continue expanding their development, engineering, tool design and manufacturing, process improvements, lean manufacturing techniques, and automate them to optimize manpower to ensure zero defect products.

Their dedicated product development centre and tool production facilities at Changodar has strengthened their ability to meet customer demands in accordance with delivery schedule. Over the past 5 years the product development and innovation centre has developed more than 1,217 products for different bearing (including ball bearing, brass bearing, cylindrical roller bearing, large size bearing, polyamide bearing, spherical roller bearing), taper and bronze bushings and more than 58 other products including speciality components.

With their expertise in design and manufacturing complex tooling components in house, they have engaged with their customers, developing and manufacturing over 7,500 types of products allowing them to meet changing customer requirements.

- ***Growing the stamping and specialised component segment.***

HEIL plans on capitalizing on the existing niche and low volume high value products in the stamping and special component segment and gradually scale up its business over next 3 to 5 years. They plan on achieving this growth in 2 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 component and supply directly to OEMs. The global stamping market is expected to grow at a CAGR of 6.4% between 2021 and 2029.

They have set up a dedicated stamping unit at their production unit at Moraiya and have installed certain machinery with tools for complex stamping at their primary manufacturing units. Further, they are in the process of developing complex compressor parts and certain other components which are used in the compressor industry and focus on manufacturing of bearing seals and stamping.

- ***Focus on increasing operational efficiencies to improve returns***

HEIL has adopted Total Productive Maintenance (“TPM”) initiative across their plants in India to improve their operational efficiency and the reliability of their manufacturing processes by lowering break downs and rejections. TPM, which they adopted initially in 2011, has helped them to ensure high quality, low costs and on-time delivery for their customers. They intend to continue implementing TPM initiatives across their Indian production facilities and extend the same to their facilities in China and Romania.

They are working on automation of various process to eliminate waste, improve efficiency and manpower optimization, continually working on cost reduction as part of TPM initiative including applying value analysis

techniques to their products to reduce cost. They have also recently introduced the 'One Harsha Project' to create a strategic business unit structure and thereby increasing the efficiency of their operations.

- ***Increased 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 its components, will be felt, and the demand is likely to increasingly shift towards precise dimension and dirt-free bearing, steel and polyamide cages as a probable solution at a premium value.

Company's inhouse tool and design facilities coupled with their latest machinery, specialised cleaning equipment and software would enable them to manufacture precision stamping components and steel cages suited for the electric vehicle segment including as import substitutes. In addition, they have also invested in enhancing their tool room and design capacity for faster cage mould 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.

With the growing penetration of EVs in the automotive market, the volumes of bearings are expected to grow at a CAGR of 5.2% during CY 2021 to CY2030 and electric vehicle penetration is expected to impact the volume of bearings demand by 0.7% in volumes in the automotive market.

- ***Focus on growth by opportunistic inorganic acquisitions and partnerships with customers***

Over the years, HEIL has focused on moving up this value chain of complexity and specialization by enhancing their manufacturing capabilities to produce complex precision components for several of their customers. As their technological capabilities evolve, they intend to increase their focus on further diversifying their product portfolio and providing high margin complex precision components to their customers across the world.

ORGANIC GROWTH, ACQUISITIONS AND STRATEGIC ALLIANCES

HEIL has historically expanded their business through a combination of organic growth, acquisitions and strategic alliances with their customers and with other component manufacturers. They expanded their outreach with the opening of new production unit in Changshu, China in 2010, acquisition of bearing cage production company Harsha Precision Bearing Components (China) Co. Ltd in Suzhou, China in 2014 and setting up of new production unit in Changshu, China, (which was subsequently integrated into Harsha Precision Bearing Components (China) Co. Ltd in Suzhou) and European operations in 2016 with the acquisition of their subsidiary Harsha Engineers Europe SRL (formerly known as M/s Johnson Metall S.A.) located in Romania. Further, in order to reduce costs and synergize all their operations in India, they have integrated all their India businesses (engineering and solar EPC business) and operations into one entity.

They also seek strategic partnerships with their key customer groups for innovation and development of new products and supply them to new geographies. They have recently partnered with a global customer to manufacture their bronze bushings requirements and have significantly grown their business from the client in a span of a couple of years.

They further seek to enhance their technological capabilities through inorganic acquisitions as well as through partnering with global technology leaders. They intend to further pursue such strategic alliances and inorganic growth opportunities, with a particular focus on technologically innovative acquisitions that may provide better access to technology with respect to their existing products and allow them to diversify their product and customer base opportunistically.

COMPETITION

The global bearing cages market is fragmented with the number of 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 global presence, specifically in low-cost manufacturing locations, which aids their access to different markets in a cost-effective manner.

COMPARISON WITH LISTED INDUSTRY PEERS (AS ON 31ST MARCH 2022)

Name of the Bank	Consolidated / Standalone	Face Value	Total Revenue for FY 2021 (₹ Cr)	Closing Price* (₹)	(EPS (Basic))	(EPS (Diluted))	NAV [^]	P/E*	RoNW (%)
Harsha Engineers International Ltd	Consolidated	10	1,339.00	-	16.06	11.90	63.34	[•]	17.42%
Listed Peers									
Timken India Ltd	Consolidated	10	2,217.53	3,014.05	43.49	43.49	220.28	69.30	19.74%
SKF India Ltd	Consolidated	10	3,700.29	4,731.25	79.90	79.90	381.43	59.21	20.95%
Rolex Rings Ltd	Consolidated	10	1,028.13	1,759.95	50.23	48.83	200.05	36.04	24.21%
Sundaram Fasteners Ltd	Consolidated	1	4,941.40	856.05	21.74	21.74	124.75	39.38	17.42%

Source: RHP; *P/E Ratio has been computed based on the closing market price of the equity shares (NSE) on August 23, 2022.

Comparison of Key Performance Indicators for Fiscal 2022 with listed industry peers

(₹ Cr)

Particulars	Harsha Engineers International	Timken India	SKF India	Rolex Rings	Sundaram Fasteners
Revenue from Operations	1,321.48	2,203.24	3,665.89	1,016.71	4,902.06
EBITDA	186.58	525.14	589.91	240.34	837.95
EBITDA Margin (%)	14.12%	23.83%	16.09%	23.64%	17.09%
Profit After Taxes (PAT)	91.94	327.11	394.96	131.88	461.83
PAT Margin (%)	6.87%	14.75%	10.67%	12.83%	9.35%
Return on Average Equity (%)	19.13%	21.80%	22.90%	29.26%	18.49%

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Harsha Engineers International Limited is proposing, subject to receipt of requisite approvals, market conditions and other considerations, to make an initial public offer of its equity shares and has filed the RHP with the RoC and thereafter with SEBI and the Stock Exchanges. The RHP is available on the website of Securities and Exchange Board of India at www.sebi.gov.in, on the websites of the Stock Exchanges at www.bseindia.com and www.nseindia.com as well as on the websites of the BRLMs, Axis Capital Limited at www.axiscapital.co.in. Investors should note that investment in equity shares involves a high degree of risk and for details relating to such risk, see "Risk Factors" of the RHP. Potential investors should not rely on the DRHP filed with SEBI for making any investment decision.

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