INVasset Knowledge Bank





9th January, 2024

INVASSET

India's Best Performing and Most Customer Centric PMS

BEML Limited, originally established as Bharat Earth Movers Limited in 1964, stands as a prominent player in the Indian manufacturing and engineering sector. Headquartered in Bangalore, Karnataka, this public sector undertaking (PSU) has evolved over the years to become a key contributor to vital industries such as defense, mining, and construction. With a comprehensive portfolio spanning heavy earthmoving equipment for mining and construction, defense vehicles, and metro and railway coaches, BEML operates under three major business verticals: Mining & Construction, Defence, and Rail & Metro.

Positioned as a Miniratna Category-I PSU, BEML is strategically poised to capitalize on robust growth opportunities within the dynamic landscape of the mining, defense, and transportation sectors. The company's proactive approach aligns seamlessly with national initiatives like "Make In India" and "Aatmanirbhar Bharat," which aim to foster self-reliance and indigenous manufacturing capabilities. The recent opening of the mining sector to private participation further enhances BEML's prospects, providing impetus to domestic production.

Amidst a period of heightened government expenditure, particularly in the railways and metro rail sectors, BEML anticipates significant growth opportunities. The Draft Defence Production & Export Promotion Policy (DPEPP) sets ambitious revenue targets, reinforcing BEML's pivotal role in achieving self-reliance and increasing domestic procurement in the defense sector. As a divestment candidate, with the government intending to divest 26% of its 54% stake, BEML's valuation is poised to benefit from an improving earnings profile. The company's strategic positioning and security clearances from the Ministry of Home Affairs further underscore its potential for sustained growth and leadership in the evolving industrial landscape.

Stock Data	
CMP (09-01-2024)	3166.05
52 Week High/Low	3316.70/1128.00
Face Value	10
Market Cap (In Crs)	13,152
NSE	BEML
BSE	500048
Bloomberg	BEML:IN
Sector	Engineering – Industrial Equipments

Shareholding Pattern (in %)		
	Jun-23	Sept-23
Promoter	54.03	54.03
FII	6.08	6.79
DII	19.51	19.03
Public	20.38	20.16

Price Performance (in%)			
(%)	1M	6M	1Yr
Nifty 50	2.74	11.45	20.64
BEML	28.86	105.33	110.02

Key Ratios	
P/E	65.5
P/B	5.55
Debt To Equity	0.16
ROE	6.30%
ROCE	10.50%
Dividend Yield	0.32%

Investment Rationale

Diversified Business Segments: BEML operates in three major business verticals - Mining & Construction, Defence & Aerospace, and Rail & Metro, providing a stable revenue base through diversification.

Leading Position in Mining & Construction: BEML is a prominent manufacturer of mining and construction equipment in India, offering a comprehensive range of machinery for both opencast and underground mines, positioning it to benefit from the growth in the mining sector.

Railways & Metro Opportunities: BEML holds a significant presence in the Rail & Metro segment, with a history of manufacturing coaches for Indian Railways and metro cars. The substantial government investments in railway and metro projects create promising growth opportunities for BEML in this segment.

Defence & Aerospace Growth: BEML holds a significant position in India's defense equipment manufacturing sector, delivering a range of military vehicles and equipment. The government's strong emphasis on the "Make in India" initiative and achieving self-reliance in the defense sector presents BEML with substantial opportunities for growth. This strategic positioning enables the company to leverage the expected expansion in the defense and aerospace industry, further solidifying its role as a prominent player in this vital sector.

International Operations and Export: BEML's global presence extends to its operations in 68 countries. This international footprint, notably in regions like Africa and the Middle East, plays a crucial role in diversifying the company's revenue sources. By actively participating in overseas markets, BEML not only strengthens its financial stability but also positions itself to tap into potential growth opportunities in international markets. This global reach enhances its ability to contribute significantly to the global defense and aerospace landscape while simultaneously bolstering its domestic standing.

Order Book Strength: BEML, as of March 2023, maintains a substantial order book with an approximate value of ₹8,570 crores. This robust order book not only provides visibility for future revenues but also signals a strong demand for the company's products and services, underpinning its financial stability.

Client Concentration Mitigation: Despite a notable client concentration, where the top three clients contribute around 63% of total revenues, BEML actively addresses this concern through a strategic approach. By diversifying and expanding its client base, the company mitigates the inherent risks associated with concentrated clients, ensuring a more balanced revenue stream.

Investment in R&D: BEML has demonstrated its commitment to innovation by increasing its Research and Development (R&D) expenditure, allocating approximately 1.9% of total revenues in FY23. This substantial investment fosters the development of new products, enabling the company to remain competitive and responsive to evolving market demands.

Strategic Alignment with Government Initiatives: BEML's business verticals align seamlessly with key government initiatives such as "Make in India," "Aatmanirbhar Bharat," and the Draft Defence Production & Export Promotion Policy (DPEPP). These policies create a supportive regulatory environment and offer potential growth avenues for BEML, further strengthening its strategic positioning.

Valuation Enhancement Opportunity: The government's plan to divest a 26% stake in BEML presents an opportunity for potential valuation improvement. This development is underscored by the Ministry of Home Affairs granting security clearance to selected bidders, indicating substantial progress in the divestment process.

Positive Industry Prospects: BEML operates in sectors with a positive industry outlook, encompassing mining, defense, and rail. Given its established presence and capabilities, the company is well-poised to capitalize on the numerous growth opportunities these sectors present, reaffirming its position as a key player in the Indian industrial landscape.

Company's Vision, Mission & Values

Vision

Market Leadership: BEML's vision centers on achieving preeminence in the Defence & Aerospace, Mining & Construction, and Rail & Metro sectors. This entails outperforming competitors, setting industry benchmarks, and consistently delivering top-tier products and services. In Defence & Aerospace, it means providing cutting-edge solutions to the armed forces. In Mining & Construction, it involves manufacturing high-quality, productivity-boosting equipment. In Rail & Metro, it requires contributing to efficient transportation systems. This vision drives BEML to innovate, prioritize customer needs, and lead in its chosen sectors.

Diversification: BEML's commitment to diversification aims to spread risk and seize emerging opportunities. By broadening its product and service portfolio, BEML aims to reduce dependency on any single sector. This entails expanding into related industries, exploring new markets, or acquiring complementary businesses. Regardless of the approach, BEML remains dedicated to upholding its reputation for excellence and unwavering quality standards. A flexible organizational structure is crucial to accommodate diversified business units effectively. BEML's diversification strategy is grounded in understanding market trends and customer needs, positioning the company as a versatile, reliable partner across various sectors.

International Presence: Aim to emerge as a prominent international player: BEML's vision emphasizes global expansion, striving to establish a robust international presence. Achieving this goal involves comprehensive internationalization strategies encompassing market expansion, strategic partnerships, and global brand recognition. BEML conducts thorough market research to identify growth prospects and adapt its products and

services to meet diverse international demands. Collaborative relationships with international partners and distributors facilitate market entry and local expertise. Building a positive global reputation as a reliable and innovative company is pivotal in attracting international customers, partners, and investors. Compliance with international standards and regulations ensures global competitiveness, reinforcing BEML's image for quality and reliability.

MISSION:

Enhancing Competitiveness through Collaboration: BEML, a renowned company, is focused on enhancing its competitiveness by prioritizing collaboration, forging strategic alliances, and engaging in joint ventures. These strategic partnerships are instrumental in keeping BEML at the forefront of the industry. The company is fully committed to embracing state-of-the-art technologies through in-house research and development (R&D) and technology transfers, driving innovation in product development.

Pursuing Profitable Growth Globally: BEML's relentless pursuit of profitable growth extends across borders, encompassing both domestic and international markets. The company is determined to explore and capitalize on business and market opportunities worldwide. Furthermore, BEML's dedication to diversified growth in new products and markets underscores its commitment to long-term success.

Values

F	Focus on Customers & Stakeholders	Customer Delight by developing products & services is BEML's primary focus. Value creation for all Stakeholders guides all their actions
I	Innovation & Technology	Being a learning organisation, they leverage Innovation and Technology in all their work
R	Reliability & Quality	They build reliability and quality in their products, processes and people
S	Speed & Responsiveness	They are agile and respond to needs of all Stakeholders promptly
T	Trust & Teamwork	Facilitate through integrity, trust, respect, transparency to become a socially responsible Corporate Citizen



Bangalore Complex



Earth Moving Division, KGF



Truck Division, Mysuru



Engine Division, Mysuru



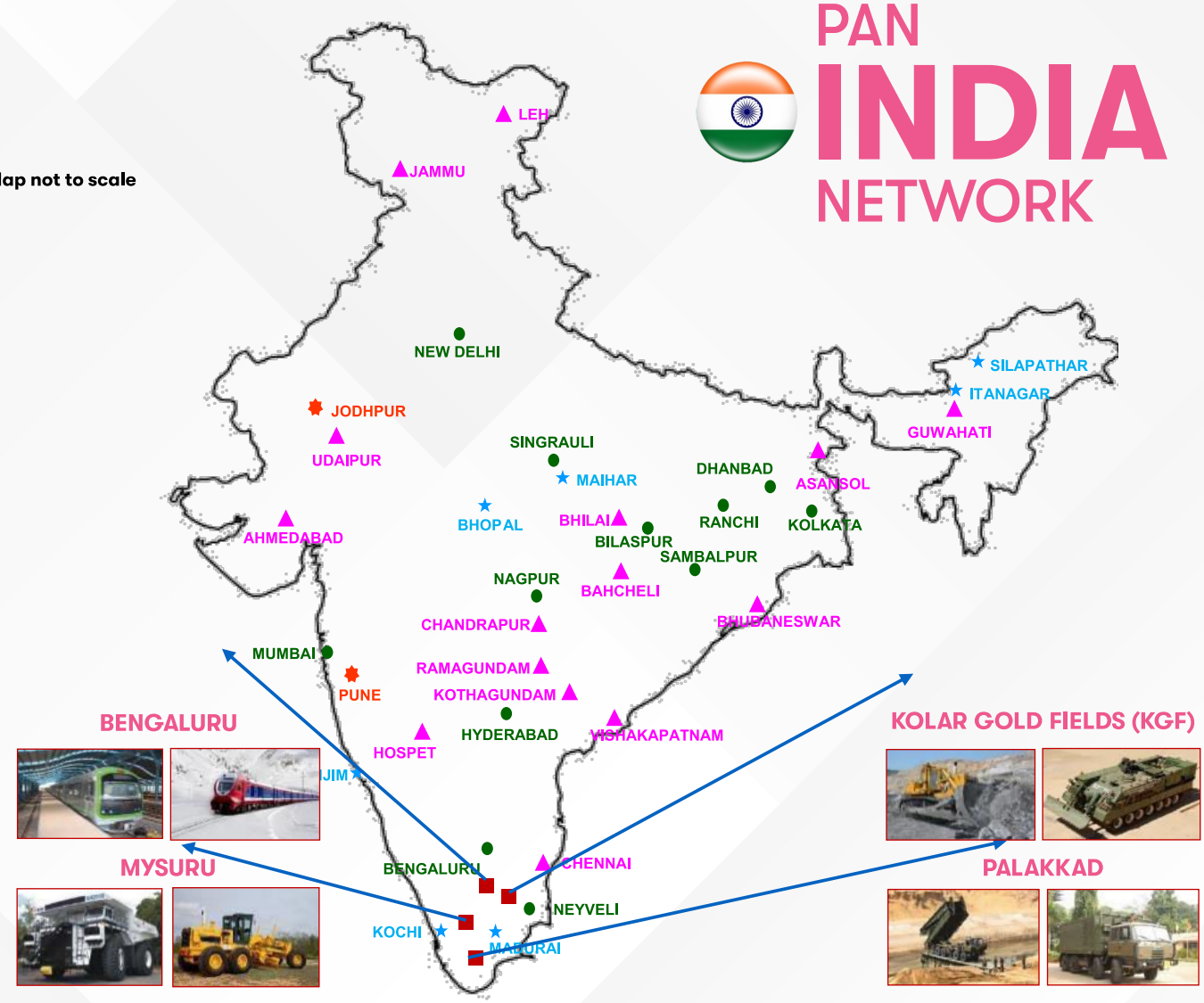
Palakkad Complex



R&D Centre, KGF

PAN INDIA NETWORK

Map not to scale



- **MANUFACTURING COMPLEXES - 4**
- **REGIONAL OFFICES - 12**
- **DISTRICT OFFICES - 15**
- **DEFENCE SPARES DIVISION - 2**
- **ACTIVITY CENTRES - 7**

NAVIGATING EXCELLENCE

Insights into the Dynamic Leadership of BEML Ltd's Board of Directors



Shri Shantanu Roy

Chairman & Managing Director

Shri Shantanu Roy (DIN:10053283) has assumed charge as Chairman & Managing Director w.e.f. 01.08.2023. Prior to assuming his present position, Shri Shantanu Roy was Director (Mining and Construction Business). He is a graduate in Electrical Engineering from NIT Raipur and an MBA in Financial Management. He is having more than 30 years of extensive experience in the capital goods sectors for Defence, Mining & Construction, Transportation, Transmission, Renewable and large power projects.



Shri Ajit Kumar Srivastav

Director (Defence Business)

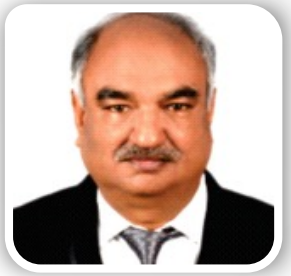
Shri Ajit Kumar Srivastav (DIN: 08741858) is a graduate in Mechanical Engineering from IIT Kharagpur in 1987. He joined BEML as an Engineer Trainee and in his professional career spanning over three decades in BEML, he has worked in various critical functions in the Company. He assumed charge as Director (Defence Business) of the Company on 01.06.2020. Prior to assuming the charge as Director, he served as Chief General Manager (Defence Marketing). He played a significant role in phased indigenization of key products and import substitution. He also created a vendor ecosystem incorporating MSMEs and set up the Regional Quality Assurance Wing covering entire Northern India. As a District / Regional Manager, he has set up the first ever dealer network for construction equipments which lead to considerable boost in sales. As Head of International Business Division, he effectively used buyer's credit opportunities to enhance exports, winning award for the highest exports in 2013-14.



Shri Anil Jerath

Director (Finance)

Shri Anil Jerath (DIN: 09543904) has been appointed as Director (Finance) and Member on the Board of BEML Limited w.e.f. 22.03.2022. Shri Jerath is a Cost & Management Accountant from the Institute of Cost Accountants of India. Before joining BEML, he has worked as Additional Director with Chhattisgarh State Electricity Board (CSEB) at Raipur and also worked with Bharat Aluminum Company Limited (BALCO) at Korba. He has rich & varied experience of 33 years in Government, Public & Private Sectors with wide exposure in all aspects of Accounting & Financial management, Accounts Finalisation and Audit, Tax Planning and Tax Management, analysing the financial viability of new ventures / new projects and forecast the amount of project finance / fund requirement, conceptualizing and implementing financial procedures including working capital management, internal financial controls and target costing.



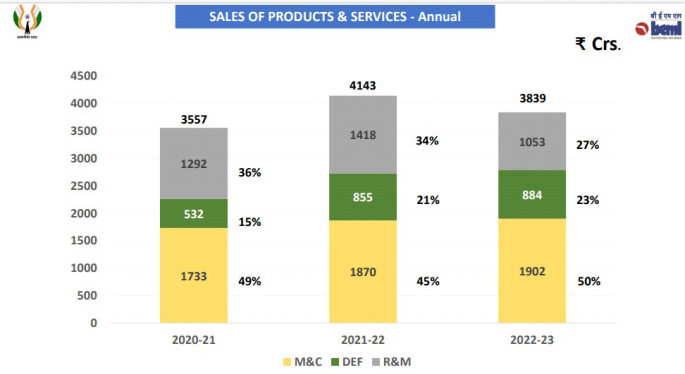
Shri Bipin Kumar

Independent Director

Mr. Bipin Kumar Gupta (DIN: 00293673) is Director of M/s Utkal Metallics Limited from 08.01.2003 to till Date which is manufacturing unit of Sponge Iron. He is also Director of M/s Cogent Steel & Pipes Pvt. Ltd. since 22.01.2018 to till Date which is manufacturing unit of MS Pipes. Further, he was Managing Director of M/s Ambica Iron & Steel Private Limited from 1988 to 2003 which is a Rolling Mill Unit for production of MS Flat, Channel Etc. He has enormous Commercial & financial knowledge as per his immense experience in Steel Industries. He is involved in this steel industry for last 44 years. He is very self-oriented, motivated and quick decision maker

Comprehensive Investment Rationale





Mining & Construction Segment (50% of revenues)

Introduction: BEML Limited, a prominent and noteworthy Indian public sector undertaking, has firmly established itself as a formidable presence in the Mining & Construction sector, a segment that contributes approximately 50% of its total revenues. Possessing a robust and extensive portfolio of heavy earthmoving equipment, the company plays an indispensable role in bolstering and fortifying India's infrastructure development and mining endeavors.

Mining & Construction Segment Overview: As of June 1st, BEML's order book stands at a substantial Rs14.6 billion, with the anticipation of an additional inflow ranging between Rs12-14 billion in the fiscal year 2024. The sector exhibits a commendably stable outlook, with a strategic goal of contributing 45% to the overall revenue, underpinned by a commendable growth rate of 15%. In pursuit of this objective, the company is diligently working towards securing 2-3 high-value contracts annually, and it is also actively exploring export opportunities in diverse regions such as Africa, the Middle East, Russia, the Commonwealth of Independent States (CIS), and the Association of Southeast Asian Nations (ASEAN) region.

Strategic Initiatives: BEML places a significant emphasis on service and spares, a facet that constitutes a substantial 40% of the Mining & Construction segment's revenue, thereby significantly bolstering its bottom line. Collaborating with Coal India, BEML plays a pivotal role in the supply of critical equipment required for open-cast mines, thereby lending vital support to Coal India's ambitious target of achieving an astounding production of 1 billion tons by the year 2026-27.

Export Growth and Technological Advancements: With a resolute focus on expanding its global footprint, BEML has successfully garnered orders from nations like Russia and Indonesia. Furthermore, there is a sanguine expectation of securing additional orders worth Rs. 300 crore within the current fiscal year. Notably, BEML's research and development (R&D) team is at the forefront of fostering innovation, actively engaged in ambitious projects such as the development of a 21 Cumulative (Cum.) Rope Shovel, higher capacity Motor Grader & Tyre handler, and the integration of cutting-edge AI-based features into its equipment lineup. These innovations are meticulously designed to ensure not only the satisfaction of its customers but also to bolster safety standards across the industry.

Market Dynamics and Capex Opportunities: In anticipation of a robust surge in demand driven by capital expenditures, BEML is closely aligned with the government's strategic plans to boost domestic coal production and channel investments into critical infrastructure development projects. The company firmly believes that the surging demand for mining and construction equipment is intrinsically linked to the advent of high-capacity projects equipped with state-of-the-art technology.

Potential Challenges: Despite the positive trajectory and optimistic outlook, BEML remains vigilant and acknowledges potential challenges that could impact its operations. These challenges include the specter of project delays within the mining sector, heightened competition, potential alterations in government policies that could have a ripple effect on its business operations, the risk of global technology leaders entering the market directly, and the ever-present challenge of maintaining favorable return ratios.

Conclusion: BEML's strategic positioning as a stalwart in the Mining & Construction sector, its unwavering commitment to expanding its presence in the global market through exports, and its relentless pursuit of innovation place it on a solid trajectory for sustained growth. However, it is imperative for the company to exercise vigilance and adaptability to effectively navigate the intricate challenges and uncertainties inherent in the dynamically evolving landscape, thereby ensuring a continued legacy of success in the highly competitive market.

Rail & Metro (27% of revenues)

BEML, a prominent player in the Rail & Metro industry, is on the cusp of experiencing substantial growth due to its robust order backlog and promising future prospects. At present, the company has a sufficient number of orders in hand to meet its sales revenue targets for the current year. Furthermore, it anticipates a significant influx of new orders, with a pipeline worth Rs. 10,000 crore expected to be awarded in the current fiscal year and the following one. One of BEML's notable achievements is securing an order for manufacturing 10 rakes of Vande Bharat Sleeper trains from the Integral Coach Factory. These trains are scheduled to begin delivery in the financial year 2023-24. Additionally, BEML is actively engaged in fulfilling orders for Main Line Electric Multiple Units, Rail Grinding Machines, and Maintenance Vehicles. In the Metro segment, BEML has been making remarkable strides. The company is actively involved in supplying Driverless Metro cars for Mumbai Line 2A and 7. Furthermore, it is collaborating with the Delhi Metro Rail Corporation for exports to the Bahrain Metro project. This international collaboration showcases BEML's global reach and commitment to providing cutting-edge transportation solutions. BEML's Research and Development team is at the forefront of innovation, concentrating its efforts on the design and development of Vande Bharat Sleeper Coaches. The company is also exploring potential partnerships for Bogie Design in Medium/High-Speed Trains and the development of Aluminum Coaches, demonstrating its commitment to staying at the forefront of technological advancements in the industry. With approximately 27% of its sales in the fiscal year 2023 attributed to the Rail & Metro sector, BEML has set its sights on expanding its presence globally in the urban transportation Metro Rolling Stock market. The company's order book for Railways & Metro currently stands at an impressive Rs. 5,163 crore, and it is optimistic about securing additional orders, especially as the Indian government plans substantial investments in railways and metro projects over the next 4-5 years.

Despite the competitive nature of the market, BEML is determined to increase the indigenization levels of its products to an impressive range of 80-85%. This commitment to self-reliance and local production is a testament to BEML's confidence in its ability to capitalize on the healthy capital expenditure in the sector. BEML's management is highly confident about securing additional orders from various metro projects, including those in Chennai, Bangalore, and Bhopal-Indore. Their unwavering determination, coupled with BEML's manufacturing expertise and advanced technology, positions the company favorably for growth. In conclusion, BEML stands at a pivotal moment in its journey, poised for significant expansion and global influence in the Rail & Metro industry. With a strong order backlog, a commitment to innovation, and a focus on indigenization, BEML is ready to make a lasting impact on urban transportation solutions, both in India and beyond.

Defence & Aerospace (23% of revenues)

BEML Limited, a prominent player in India's Defence & Aerospace sector, has solidified its position with an impressive order book amounting to Rs40.3 billion as of June 1st. What makes this even more noteworthy is the recent influx of orders worth Rs4.2 billion from the Ministry of Defence, specifically for High Mobility Vehicles (HMVs), with the promise of imminent orders amounting to Rs10 billion for HMVs and Command Post Vehicles. These developments underscore BEML's growing influence and strength in the market. The company is strategically positioned to capitalize on a myriad of growth opportunities, including a significant one related to the overhaul of approximately 350 Armoured Recovery Vehicles (ARVs), which carries an order potential of approximately Rs21 billion. Furthermore, the outlook for new supplies and overhauls of HMVs is equally promising, with estimated order potentials of about Rs28 billion and Rs5 billion, respectively. BEML's strategic alignment with the Indian government's initiatives to bolster indigenous design, development, and manufacturing of defence equipment is a testament to its forward-thinking approach. The Atmanirbhar Bharat initiative, along with the government's comprehensive defence modernization plans for 2023-24, augments BEML's optimistic outlook. Notably, the launch of 'SRIJAN,' an indigenization portal, and the planned reduction of defence imports by 2025 are perfectly aligned with BEML's commitment to self-reliance. In the global context, India's allocation of US$64.62 billion for defense in FY22 reflects a 1.4% YoY increase, which is significant in the landscape of international trends in defence spending. India, with a keen focus on defence capital expenditure and the ambition of becoming one of the top three global defence spenders by FY30, is poised for substantial growth in this sector.

This presents BEML with a remarkable opportunity to thrive as a prominent player in the Indian defence industry. Moreover, India's aspiration to increase defence exports to Rs350 billion (equivalent to US$5 billion) by FY25 aligns perfectly with BEML's strategic vision. The company is actively exploring opportunities in this regard. BEML boasts a diverse export portfolio that encompasses a range of critical defence systems, including Bridging Systems, Medical Health Systems, and Engineering Plant Equipment. This diversity positions BEML as a key player in the global defence market, well-prepared to contribute to India's goal of becoming a significant exporter of defence equipment. BEML's unwavering commitment to innovation is evident in its ongoing Research and Development (R&D) projects. Notable among these is the development of a groundbreaking 1500hp engine and various variants of High Mobility Vehicles, which showcase BEML's readiness to capitalize on emerging opportunities and further enhance India's defence capabilities. In summation, BEML Limited stands proudly at the forefront of India's Defence & Aerospace sector, propelled by a robust order book, strategic alignment with government initiatives, and a proactive stance in response to global trends. With an unyielding focus on self-reliance, innovation, and international collaboration, BEML is optimally positioned for sustained growth and is poised to play a pivotal role in India's journey towards becoming a global leader in defence manufacturing. The company's dedication to excellence and its commitment to enhancing India's defence capabilities make it a compelling and vital contributor to the nation's defence industry and its aspirations on the global stage.

BEML Product Portfolio

Major Products Manufactured by BEML Limited

DEFENCE & AEROSPACE

- High Mobility Vehicles (HMV)
  - Bridge Systems
  - Missile Launchers
  - Radar Systems



- Combat Mobility Vehicles
  - Armoured Recovery Vehicle
  - Armoured Repair & Recovery vehicle
  - Mine Ploughs



- Aggregates
  - BMP Transmission
  - Ejector & Air Cleaner
  - Hull for T-72



- Aircraft Towing tractors
- Aircraft Weapon Loader
- Ground Support & Handling Equp.
- Tank Transportation Trailers
- Milrail Wagons
- Rocket Motor Casings for Missile
- Airborne Structure & Assemblies
- Construction eqpt to E-in-C, DGBR





MINING & CONSTRUCTION

- Bull Dozers (90 – 860 FHP)



- Dumpers (35 Ton–205 Ton)



- Excavators (0.3 - 12 Cu.m)



- Shovels / Walking Dragline



- Water Sprinklers (28000 – 70000 Litres)



- Motor Graders (137, 145 & 285 HP)



- Front End Loaders
- Backhoe Loader



- Pipe Layers / Wheeled Dozers / Tyre Handlers / Under Ground Mining Equipment

RAIL & METRO

- Metro Cars - Delhi, Bengaluru, Jaipur, Kolkata, Mumbai (Driverless)



- Electrical Multiple Units



- Maintenance Vehicles – Diesel Electric Tower Car, Rail Grinding Machine, Catenary Maintenance Vehicle





- Passenger Coaches
- Treasury Vans

6

This showcases a comprehensive catalogue of BEML Limited's diverse product range, segmented into three primary domains: Defence & Aerospace, Mining & Construction, and Rail & Metro. BEML, an eminent heavy equipment manufacturer, demonstrates its engineering prowess through an array of products including advanced mobility vehicles and systems for defense, robust machinery for mining and construction operations, as well as reliable rolling stock for urban rail networks. This assortment reflects the company's versatile manufacturing capabilities and its pivotal role in supporting critical sectors with specialized equipment, ranging from armored recovery vehicles and missile launchers to high-capacity excavators and metro cars for major urban centers. The slide not only highlights the company's expansive inventory but also underlines its contribution to infrastructure development, defense, and urban transportation.



ARMOURED RECOVERY & REPAIR VEHICLE (ARRV)

Armoured Recovery and Repair Vehicle (ARRV) ARJUN Tank is to recover disabled combat tanks and take them to a place, where they can be repaired and replenished to be ready for battle again. ARRV will consist of major recovery systems like Main Winch, Auxiliary winch, Crane, Anchor-cum- Dozer. Main automotive components and sub-systems will be virtually identical to the battle tank. This commonality ensures simplified spares inventory and crew training leading to easier and more efficient logistic management.



ARMOURED RECOVERY VEHICLE WZT – 3

ARV WZT-3 is also equipped with NSW 12.7 mm anti-aircraft gun, vehicle commander observation device, drivers observation device, NBC protection, fire suppression system, communication equipment, electric welding equipment, smoke grenade system, load carrying platform, towing device, dozer blade and set of special devices and tools.



ENGINEERING MINEPLOUGH

The Engineering Mine plough supplied by BEML is available in two versions: the Track Width Mine Plough (TWMP) and the Full Width Mine Plough (FWMP). The TWMP has eight tines per side while the FWMP clears the whole width of the vehicle. The FWMP and the TWMP are interchangeable. The TWMP comprises two independent blades, left and right.

The hydraulic cylinder lowers and raises the equipment from the control box. The FWMP is the TWMP with the addition of a third plough blade in the centre and two arms. A TWMP can be converted into a FWMP. The Mine plough can be fitted to any tank. A quick-fit mounting enables the Mine plough to be fitted or removed within 15 minutes. Existing eyes at the top of the toe plate are used to pin the plough in place, enabling the Mine plough to be fitted or removed within minutes.

PONTOON BRIDGE SET

The Pontoon Bridge Set is used by Army to transport military vehicles over water obstacles and marshy grounds. It consists of various members like mid-stream & shore for assembling a bridge over water obstacles. Mid-stream, shore & road laying members are loaded on BEML-Tatra vehicles thereby allowing for easy transportation of the equipments. The set is fully equipped for unloading / loading of the members and formation of the bridge within a short span of time. The maximum load carrying capacity of the bridge is 60 tonnes. Mid-stream members are joined together to form the floating bridge. Shore members are connecting to the mid-stream members & serve as the transition section between the floating part and the bank. The bulldozer attachment fitted on the road laying truck is used for creating approached road, removal of obstacles etc. road laying members are used for consolidating on the soft soil terrain. Ferries can also be constructed by using Mid-stream & Shore members. The ferry can carry individual loads from one bank to another with the boats pushing it. The boat loaded on the dolly is towed by a BEML-Tatra vehicle. Dolly is equipped with the system for launching the boat as well as loading the boat back. The boat is used for pushing / towing the pontoon members for the bridge construction as well as for pushing the ferry. The truck mounted crane is used for loading / unloading of various members both at launching as well as in the maintenance work shops.





PRITHVI MISSILE LAUNCHER

Prithvi Missile is a transporter cum launcher vehicle. The missile is transported on launcher in horizontal mode and articulated to vertical mode using hydraulic control system. Electronic controller provides the desired safety inter locks during articulation. The launching of the missile is done over a launch table adjusting the missile vertically to the desired level using the leveling system. The theodolite provided on the changing system provided on the launcher helps to check the azimuth alignment. The warhead changing system provided on the launcher is used for changing the warhead in-situ. Provision has also been made to mount the launch pad computer. A 2kw DC Gen set will be provided on the launcher, which will give the power required for prelaunch check of the missile and launcher electronic controllers.



BRSTN Wagons

are fitted with air brake system of single pipe graduated release type. Air brake cylinders & other aggregates like valves, reservoir, pipings, etc., are mounted on bottom side of Underframe. The Wagon is fitted with one number each transition type center buffer couplers on either sides to facilitate coupling & decoupling with other rolling stocks. Loading flaps are provided over side buffers to facilitate loading/unloading. Two Nos. of buffers are provided on either side of wagon. Lashing arrangement is provided on four sides of wagon for lashing purpose. BRSTN Wagons are primarily used for transportation of Military vehicles.



BWTB Wagons are fitted with single pipe graduated release Airbrake system with L – type composition brake block as per Indian Railway standard. Hand wheel type parking brakes are provided on both bogies for parking the wagon on gradients. BWTB Wagons are fitted with transition type center buffer couplers along with side buffers. This enables the wagon to be coupled to other rolling stocks either with center buffer couplers of screw couplers. Loading flaps are provided over side buffer to facilitate loading of battle tanks. Lashing chains, Track guides & scotch blocks are provided for securing the battle tanks during transportation. BWTB Wagons are primarily used for transportation of Battle tanks, Heavy artillery equipments and Military vehicles.



Milrail Coaches are specifically designed to meet the requirements of Military Personals. Increased Bay Width of 1800 mm is provided to accommodate wider cushioned seats and berths. Additional features include ladies coupe, safety features like end to end audio communication in the rake, UIC Rubber Vestibule with Rolling Shutters on the end walls, Bogie mounted air brake cylinders, etc. It has seating / sleeping capacity for 72 passengers.



BD30W-1 WHEEL DOZER

High power engine, rugged Electric Shift Transmission featuring 3 forward and 3 reverse speeds, heavy duty planetary axle for high tractive effort and gradeability at all operating conditions.

Attention free wet multiple disc brakes for front and rear axles, and box type chassis for uniform stress distribution. The cutting edges, end bits, pins and bushings are highly reliable and durable.

Articulation with power steering, optimum combination of travel speed, turning radius and wheel base ensures very high level of manoeuverability



BD355 CRAWLER DOZER

BEML BS6D170-1 Diesel Engine : Features a generous power to weight ratio for dynamic dozing performance.
Power Shift Transmission: Smooth and responsive gear shifts with single-lever for instant speed and directional changes.
Operator Comfort: Conveniently located armchair steering control for enhanced operator comfort with Hexagonal sound suppressive cabin.
Pilot Operated Hydraulic System :It offers effortless fine control blade through joystick.
Segmental Sprockets :Bolt-on type segmented sprocket permits quick on site replacement.



BD475-2 CRAWLER DOZER

Outstanding Productivity.
Stress absorbing undercarriages offer mighty traction.
A high-potency engine for powerful dozing and ripping.
Breakthroughs in fuel economy.
Automatic lockup torque converter maximizes production while assuring excellent fuel economy.
The Cummins-QST30 T2 Tier II electronic engine provides maximum fuel conservation.
Minimum down time.
Stress-absorbing undercarriages extend service life.
I Unique modular design makes it easy to remove power train components, without oil spillage.
Advanced monitoring system helps prevent minor problems from becoming major ones.

Other Key Points

BEML Limited has demonstrated noteworthy improvements and achievements in various financial and operational parameters, underlining its commitment to sustained growth and excellence. Here's a detailed breakdown of these accomplishments:
In the realm of Defence Business, BEML has exhibited impressive resilience and growth, with a commendable revenue expansion of 3.43% compared to the previous year. This substantial increase underscores the company's ability to navigate a competitive landscape and capitalize on opportunities in the defense sector. Similarly, in the Mining & Construction (M&C) business segment, BEML has continued its upward trajectory by achieving a revenue growth of 1.78% over the previous year. This growth signifies the company's consistent efforts to bolster its presence in this vital sector, further cementing its role in India's infrastructure development. Furthermore, BEML's Spare Part business has emerged as a significant contributor, achieving a remarkable revenue milestone of Rs. 956.58 crore. This achievement represents a substantial growth rate of 2.64% when compared to the preceding year. It highlights BEML's proficiency in not only manufacturing heavy equipment but also in maintaining and supplying essential spare parts to support its customer base effectively.

On the financial front, BEML has made substantial strides in optimizing its working capital, demonstrating a prudent reduction of 12%. This reduction showcases the company's efficient management of its operational resources, enabling it to allocate capital more judiciously for strategic initiatives and growth opportunities. Moreover, BEML has effectively managed its trade receivables, achieving an impressive reduction of 34%. This reduction reflects the company's focus on streamlining its cash flow and ensuring timely payments from customers, enhancing its overall financial stability. One of the most encouraging achievements is the notable increase in the value added per employee, which has risen from Rs. 31 lakhs in the previous year to Rs. 33 lakhs. This marks a substantial 6.45% jump and underscores the company's commitment to employee productivity and efficiency. It also highlights BEML's dedication to fostering a culture of innovation and excellence within its workforce.

In conclusion, BEML Limited's recent financial and operational achievements underscore its position as a dynamic and forward-thinking organization. These accomplishments, including revenue growth in key business segments, improved working capital management, reduced trade receivables, and increased value added per employee, collectively demonstrate BEML's commitment to sustained growth, operational excellence, and customer satisfaction. These achievements not only reflect the company's current success but also bode well for its future prospects in the highly competitive market.

Strengths

- Established manufacturing infrastructure and extensive knowledge base ensure operational excellence.
- Robust R&D base, contributing to over 76% of sales through the continuous development of innovative products.
- Proficiency in designing and manufacturing high-end mining equipment showcases technical prowess and market relevance.
- Extensive sales and service infrastructure, with established regional, district offices, and activity centers, strengthens customer support across India.*

Weaknesses

- Depletion of skilled manpower and an aging workforce pose challenges in maintaining workforce dynamism and innovation.
- No assured business from the Government of India, unlike some other Defense Public Sector Undertakings, creating uncertainty.
- Uncertainty in orders for Rolling stock from Indian Railways introduces revenue stability concerns.
- Challenges related to sourcing critical aggregates and technologies may impact production capabilities and hinder innovation.*

S W O T

Opportunities

- Substantial increase in the Indian Army's modernization budget, aligning with the 'Make in India' initiative, offers avenues for growth.
- Growth opportunities in the mining and construction sectors with a heightened focus on infrastructure development and AI integration.
- Rail and metro expansion in India, coupled with increased demand for Electric Multiple Units, presents a lucrative market.
- Diversification into new areas, including the aerospace sector and unmanned vehicles, opens up exciting prospects for expansion and innovation.

Threats

- Competition from technology leaders directly operating in India intensifies market challenges and requires strategic responses.
- Difficulty in sourcing critical aggregates and technologies poses a risk to production efficiency and product development.
- Increased pressure on reducing life cycle costs requires vigilant cost management and operational efficiency.
- Intensified competition from Indian private industry and foreign OEMs demands a proactive approach to maintain market share and profitability.

Industry Overview

Defence & Aerospace :-

The Indian defense sector presents compelling investment opportunities driven by geopolitical realities, modernization initiatives, and a robust domestic demand. As the world's third-largest spender on defense, India is committed to strengthening its military capabilities, fostering innovation, and reducing dependency on imports. These macro trends create a favorable environment for investors eyeing the defense sector.

One key driver of investment in the Indian defense sector is the government's emphasis on indigenization and self-reliance, as evidenced by initiatives like "Make in India" and the recently announced Defense Acquisition Policy (DAP 2020). These policies aim to reduce reliance on foreign suppliers, encouraging domestic manufacturing and technology development. Investors can tap into this trend by identifying companies involved in defense production, especially those with a focus on research and development.

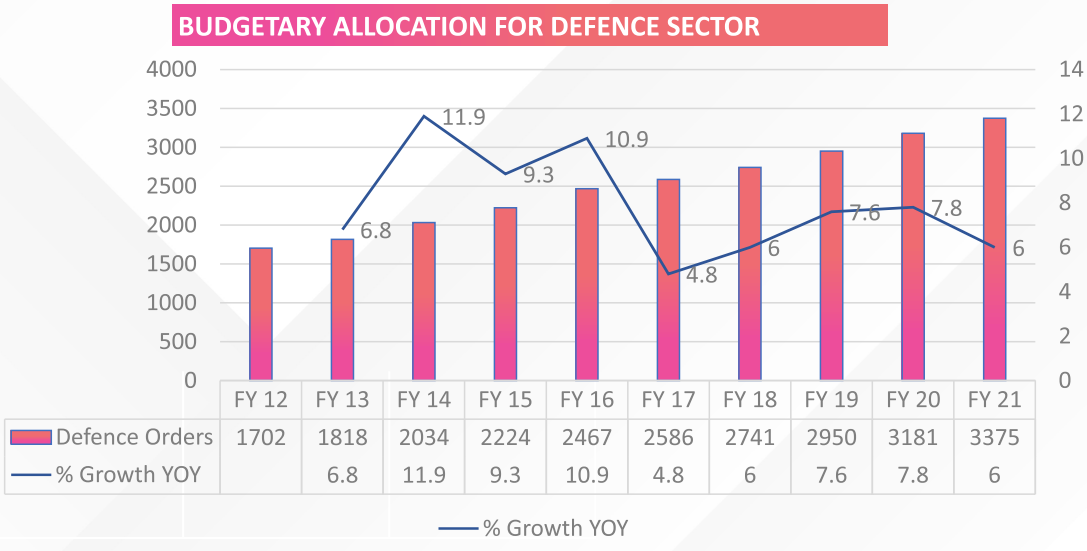
Geopolitical tensions in the region also contribute to the growth prospects of the Indian defense sector. With a dynamic security landscape, India continually seeks to enhance its military capabilities, creating sustained demand for defense equipment and technologies. Investors can strategically allocate funds to companies engaged in the production of strategic assets such as missile systems, naval vessels, and advanced avionics, benefiting from the heightened demand for cutting-edge defense solutions.

Moreover, the modernization drive within the Indian armed forces presents lucrative investment avenues. Upgrades and replacements of aging equipment provide opportunities for companies involved in manufacturing next-generation defense systems, including cybersecurity solutions, unmanned aerial vehicles (UAVs), and electronic warfare systems. Investors should focus on companies with a proven track record in delivering technologically advanced solutions to meet the evolving needs of the armed forces.

The burgeoning defense exports market is another factor to consider. India aims to position itself as a global defense exporter, opening avenues for investors to explore companies with a strong international presence. As the nation strengthens its defense ties with various countries, companies engaged in the export of defense equipment and services stand to benefit, offering investors exposure to a broader market.

However, it's essential for investors to be mindful of regulatory challenges, geopolitical uncertainties, and the cyclical nature of defense spending. Government policies and budget allocations play a significant role in shaping the sector, and changes in political dynamics can impact investment outcomes. Diligent research on individual companies, their order books, and technology capabilities is crucial for making informed investment decisions in the Indian defense sector.

In conclusion, the Indian defense sector presents promising investment opportunities driven by domestic modernization efforts, geopolitical dynamics, and a growing focus on self-reliance. Strategic investment in companies aligned with the government's vision for indigenization and those with a global outlook can yield attractive returns in the evolving landscape of India's defense industry.



	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
Defence Orders	1702	1818	2034	2224	2467	2586	2741	2950	3181	3375
% Growth YOY		6.8	11.9	9.3	10.9	4.8	6	7.6	7.8	6

Indian Defence Budget: In the Union Budget for 2021-22, the defence sector has been allocated Rs 4.78 lakh crore, including an outlay for the payment of pensions, against last year's Rs 4.71 lakh crore. The total amount includes capital expenditure of Rs 1.35 lakh crore to purchase new weapons, aircraft, warships and other military hardware against the capital outlay of Rs.1.31 lakh crore during 2020-21. Last year, the jump in the revised expenditure for 2020-21 of the Navy and Air Force was much more

Mining & Construction Segment: The Mining and Construction segment in India plays a pivotal role in the nation's economic development, contributing significantly to infrastructure growth, job creation, and industrial expansion. This sector encompasses a wide range of activities, including mining of minerals and metals, quarrying, and the construction of infrastructure such as roads, bridges, and buildings.

In recent years, the Indian government has prioritized the Mining and Construction sector as a key driver of economic growth. The "Make in India" initiative and the National Infrastructure Pipeline (NIP) underscore the importance of robust mining and construction activities in fostering a self-sufficient and globally competitive economy. The sector's growth is fueled by a combination of domestic demand and initiatives to upgrade and expand the country's infrastructure.

India's mining sector is diverse, with a rich repository of minerals, including coal, iron ore, bauxite, and various industrial minerals. The government has undertaken reforms to streamline mining processes, enhance transparency, and attract private investment. This has led to increased exploration activities and the opening up of new mining opportunities. Investors in mining should monitor policy developments, environmental regulations, and technological advancements, as these factors significantly influence the industry's trajectory.
In the construction segment, India's rapid urbanization and infrastructure development have spurred robust demand for construction activities. Major projects such as the Bharatmala Pariyojana, Sagarmala, and the Pradhan Mantri Awas Yojana contribute to a burgeoning construction landscape. Investors should keep an eye on companies involved in the construction of highways, ports, airports, and affordable housing, as these segments are likely to witness sustained growth.

Technological innovation is transforming the Mining and Construction segment in India. Adoption of advanced equipment, automation, and digital technologies is enhancing efficiency, safety, and project execution. Investors with an eye on companies embracing these technological trends can benefit from the sector's evolution.
Challenges in the form of regulatory complexities, environmental concerns, and land acquisition issues persist in the sector. Investors should factor in these challenges while assessing risk and return profiles. Additionally, the cyclical nature of the construction industry and dependence on government infrastructure projects highlight the need for a nuanced investment approach.

In conclusion, India's Mining and Construction segment present compelling opportunities amid the nation's ambitious infrastructure plans and economic development initiatives. Investors keen on this sector should closely monitor policy changes, technological advancements, and project pipelines while considering the inherent challenges for a well-informed and strategic investment approach.

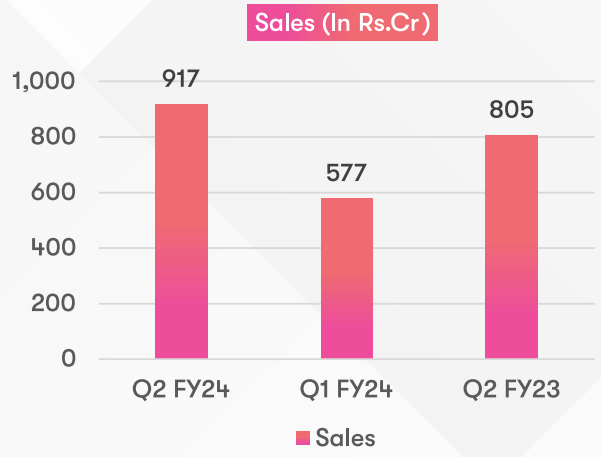
Rail & Metro: India's rail and metro sector plays a pivotal role in the nation's expansive transportation infrastructure, linking people, goods, and regions across the country. With a blend of traditional rail networks and modern metro systems, the sector is adapting to meet the escalating transportation demands of a rapidly urbanizing population.

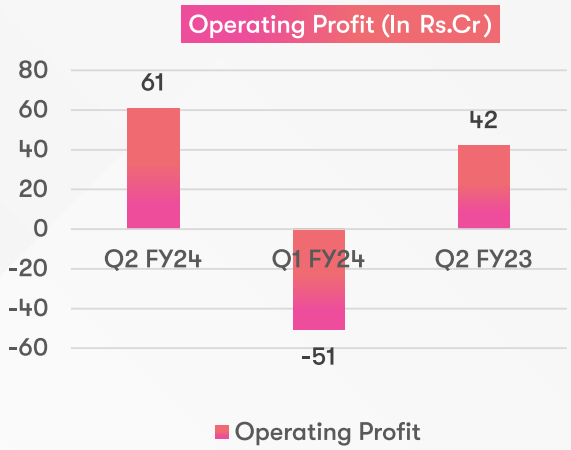
The Indian Railways, one of the world's largest networks, connects remote villages to major cities, facilitating seamless movement of goods and passengers. Recent initiatives like the Dedicated Freight Corridor and high-speed rail projects, such as the Mumbai-Ahmedabad Bullet Train, underscore the government's commitment to modernizing and expanding railway infrastructure for efficiency and economic development.

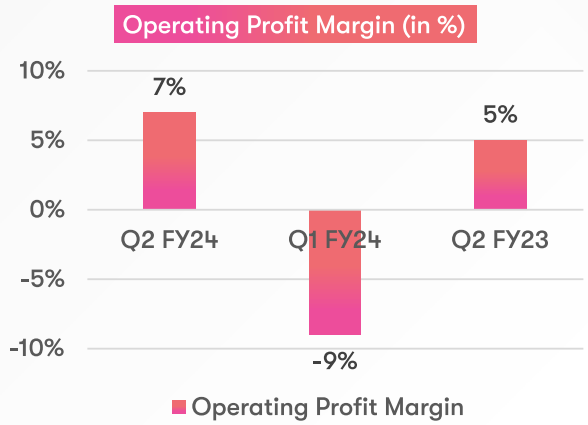
The metro rail segment has seen remarkable growth, with cities like Delhi, Mumbai, Bengaluru, Kolkata, and Chennai having operational networks. Other cities are in various stages of planning and execution. The emphasis on sustainable urban transportation is driving metro rail expansion.

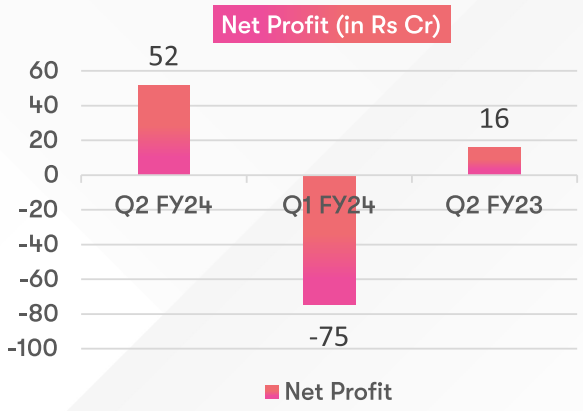
The sector presents investment opportunities for private participation, with Public-Private Partnerships funding critical infrastructure projects. Technological advancements, including modern signaling systems and eco-friendly practices, contribute to a more sophisticated rail and metro ecosystem.

Concall Highlights (Recent Quarter)

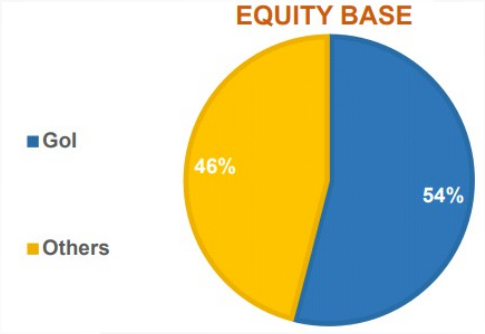










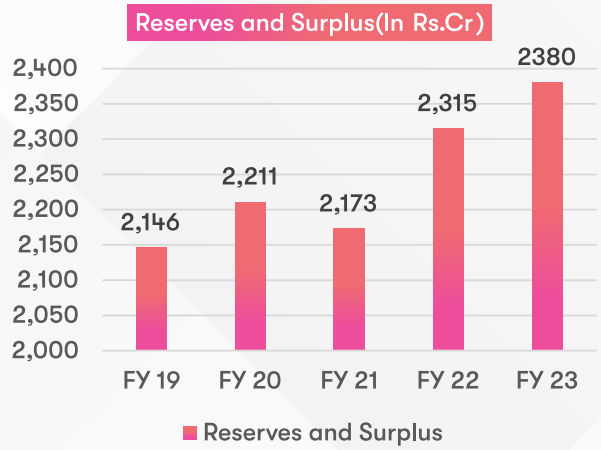


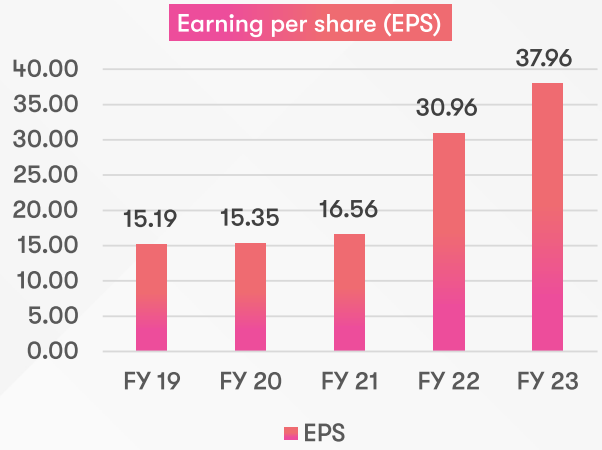
Peer Comparison

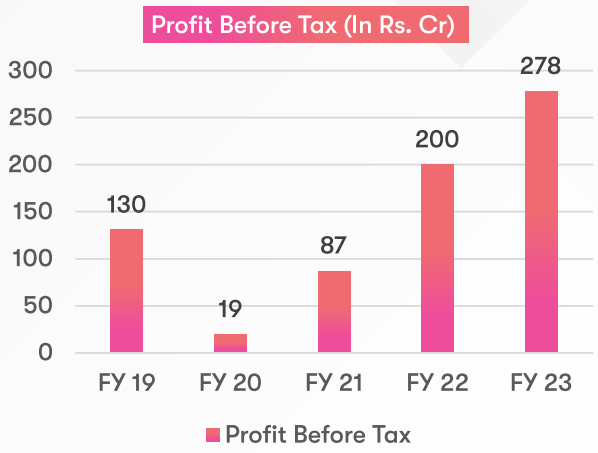
Particulars	BEML	AIA Engineering Ltd.	Triveni Turbines Ltd.
CMP(Rs) (09-01-2024)	3166.05	3626.20	401.55
Revenue(Rs in cr)	3898.95	4838.02	1247.55
EBITDA (Rs in cr)	388.04	1,475.18	276.40
PAT(Rs in cr)	157.89	1,056.50	192.88
PBDIT Margin %	9.95	30.05	22.15
PAT Margin %	4.05	21.51	15.46
ROCE %	10.04	24.01	32.97
ROE %	6.52	18.55	25.32
Debt to Equity (x)	0.15	0.09	00
Basic EPS (Rs)	37.91	111.95	5.97
Diluted EPS (Rs)	37.91	111.95	5.97
P/E(x)	65.5	28.1	54.6
P/B(x)	5.55	5.57	14.3
P/S(x)	3.36	6.78	8.70
Enterprise Value (Rs in cr)	13,533	33,326	12,348
EV/EBITDA (x)	14.38	18.35	37.33
Market Cap (Rs in cr)	13,152	34,150	12,701
Current Ratio (x)	2.38	6.07	1.86
Book Value (Rs)	569	650	27.90
Dividend Yield %	0.32	0.44	0.00
Interest Coverage(x)	8.39	73.38	277.78
Asset T/O (%)	0.73	0.71	0.87
RoA%	3.15	15.92	14.37

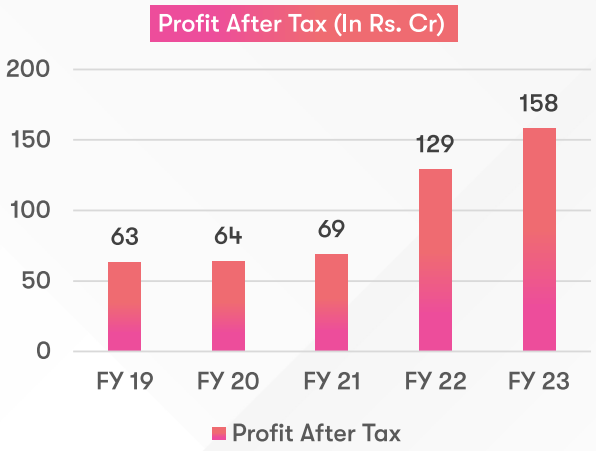
Financial Snapshot

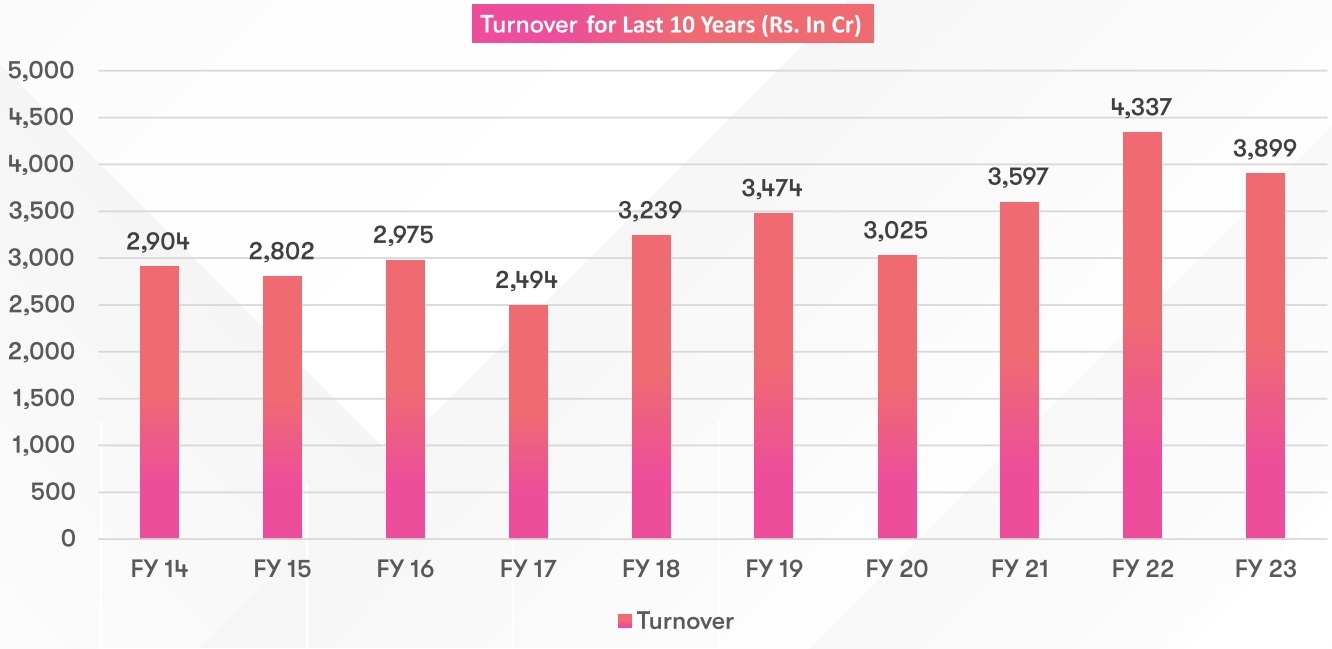
Particulars	FY 23	FY 22	FY 21	FY 20	FY 19
Financial Position			(₹In Cr)		
Equity Share Capital	41.77	41.77	41.77	41.77	41.77
Reserve & Surplus	2379.71	2314.92	2172.64	2211.00	2145.60
Total Non- Current Assets	755.61	875.13	881.45	909.13	837.56
Total Current Assets	4254.18	4833.9	4852.38	4162.63	4174.83
Cash and Cash Equivalents	39.34	33.94	5.36	27.85	31.43
Total Current Liabilities	1786.29	2027.30	2089.55	1447.12	2012.26
Total Non-Current Liabilities	802.41	1325.41	1430.03	1371.83	812.56
Contingent Liabilities	682.07	759.95	595.75	662.37	11149.14
Operating Results			(₹In Cr)		
Total Income	3922.54	4343.19	3616.81	3074.00	3497.49
Total Expenditure	3644.83	4143.45	3529.69	3054.63	3367.04
Profit/(loss) before tax (PBT)	277.71	199.74	87.11	19.36	130.45
Tax	119.82	71.15	18.41	-44.32	67.29
Profit/(loss) after tax (PAT)	157.89	128.59	68.70	63.68	63.16
Ratios					
PBDIT margin (%)	9.95	7.27	5.69	4.37	7.50
PBT margin (%)	7.12	4.60	2.44	0.64	3.75
Return on net worth (%)	6.52	5.46	3.11	2.83	2.88
Return on capital employed (%)	10.04	6.76	3.47	1.65	6.33
Return on asset (%)	3.15	2.25	1.20	1.25	1.26
Debt To Equity Ratio (x)	0.15	0.35	0.29	0.11	0.18
EPS (?)	37.91	30.88	16.50	15.29	15.17
Enterprise Value	5580.60	8378.89	5880.20	2103.86	4603.89
Cash Flows			(₹ in Cr)		
Operating Activities	563.41	51.41	-300.99	105.84	256.82
Investing Activities	-20.09	-25.34	-39.04	-51.28	-62.43
Financing Activities	-334.85	-9.95	-176.21	2.93	-129.19
Net Cash Flows	208.47	16.13	-526.24	57.49	65.19


Reserves and Surplus(In Rs.Cr)
2,400
2,350
2,300
2,250
2,200
2,150
2,100
2,050
2,000
2,146
2,211
2,173
2,315
2380
FY 19
FY 20
FY 21
FY 22
FY 23
Reserves and Surplus


Earning per share (EPS)
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
15.19
15.35
16.56
30.96
37.96
FY 19
FY 20
FY 21
FY 22
FY 23
EPS


Profit Before Tax (In Rs. Cr)
300
250
200
150
100
50
0
130
19
87
200
278
FY 19
FY 20
FY 21
FY 22
FY 23
Profit Before Tax


Profit After Tax (In Rs. Cr)
200
150
100
50
0
63
64
69
129
158
FY 19
FY 20
FY 21
FY 22
FY 23
Profit After Tax


Turnover for Last 10 Years (Rs. In Cr)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2,904
2,802
2,975
2,494
3,239
3,474
3,025
3,597
4,337
3,899
FY 14
FY 15
FY 16
FY 17
FY 18
FY 19
FY 20
FY 21
FY 22
FY 23
Turnover

Technical Outlook



BEML Limited's weekly stock chart presents a breakout following a consolidation period, with increased trading volumes at the breakout point.

The stock's simple and exponential moving averages are on an upward trajectory over various time frames, signaling a positive trend.

The Relative Strength Index (RSI) is elevated in both daily and weekly measurements, suggesting robust market activity, although such high values often prompt assessments of potential overbought conditions.

Moving Averages Days	Simple Moving Average	Exponential Moving Average
5	3027.48	3059.35
10	2928.62	2955.17
20	2784.23	2816.86
50	2481.82	2586.98
100	2389.94	2372.54
200	1946.90	2102.75

Pivot Levels : FIBONACCI		
R1 3150.09	Pivot 2981.27	S1 2812.44
R2 3254.39		S2 2708.14
R3 3423.22		S3 2539.32

	Daily	Weekly
Relative Strength Index (RSI)	76.62	81.17

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This research has been done by the Core Fundamental Research Team of InvAsset PMS Desk.

Anirudh Garg
anirudhgarg@invasset.com

Harshal Dasani
harshaldasani@invasset.com

Bhavik Joshi
bhavikjoshi@invasset.com

INVASSET

India's Best Performing and Most Customer Centric PMS

MUMBAI
911 One Lodha Place,
Lower Parel, Mumbai 400013

GURUGRAM
4th Floor Two Horizon Centre,
DLF Phase 5, Gurugram,
Haryana 122002

LUDHIANA
1401, Aspen 2, Centara Greens,
Pakhowal Road, Opp. Riviera Resort,
Ludhiana 141001

1800-309-2172
98158-10172

info@invasset.com

www.invasset.com