



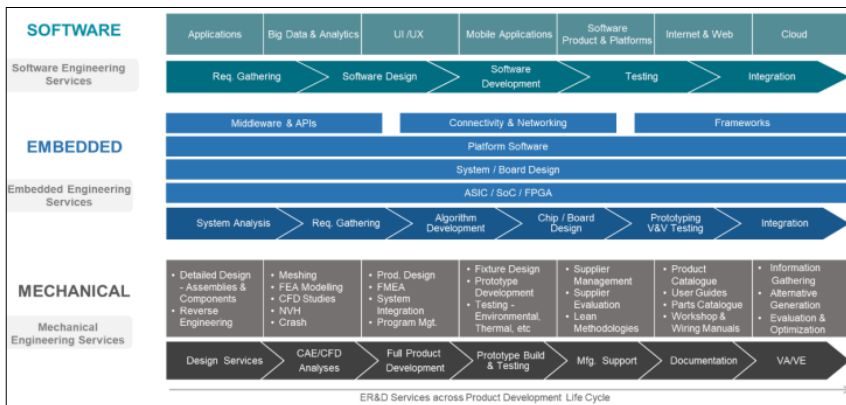
Tata Technologies Limited

Issue Opens	Wednesday, 22 Nov, 2023
Issue Closes	Friday, 24 Nov, 2023
Price Band (in Rs)	475 - 500
Bid Lot	30 shares and multiples thereafter

Industry Overview: Global Engineering Research & Development (ER&D) Services

ER&D are set of services offered to enterprises on activities which involve the process of designing and developing a device, equipment, assembly, platform, or application such that it may be produced as a product for sale through software development or a manufacturing process. The ER&D services market comprises of product engineering services and process engineering services. Product engineering services most commonly address the product development lifecycle for companies, while process engineering services involve services to assist in the production of facilities and processes that produce value-added outputs and components through plant design engineering, manufacturing engineering, industrial engineering, and process control systems.

Exhibit 01: Breakup of ER&D Services

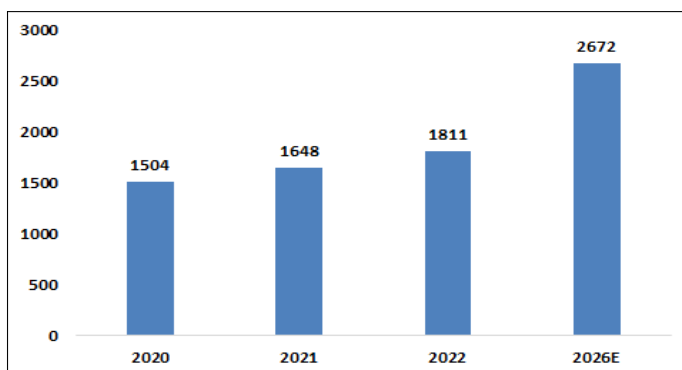


Source: Company RHP, Progressive Research

Global ER&D Services Spend

The engineering services and technology solution industries are characterized by rapid technological changes, evolving industry standards, changing client preferences and new product and service introductions. Currently, global ER&D spending is estimated at USD1,811bn (2022); out of this USD810bn was attributed to digital engineering spending. This mainly comprised of spending on new-age technologies like the Internet of Things (IoT), blockchain, 5G, augmented reality, virtual reality, cloud engineering, digital thread initiatives, advanced analytics, embedded engineering and generative artificial intelligence (AI), among others. Additionally, digital engineering spending is expected to grow at a CAGR of approx. 16% from 2022 to 2026.

Exhibit 02: ER&D Spend (USD in bn)



Source: Company RHP, Progressive Research

SNAPSHOT		
Issue Opens	Wednesday, 22 Nov, 2023	
Issue Closes	Friday, 24 Nov, 2023	
Price Band (Rs)	475/500	
Bid Lot	30 shares and multiples thereafter	
Face Value	Rs2	
Listing	BSE & NSE	
Type of Issue	Fresh Issue & OFS	
Offer Size (Rs Mn)	Fresh Issue	-
	OFS	30,425
	Total	30,425
*Implied Market Cap (Rs Mn)	202,834	
P/E (based on FY23 EPS)*	32.50	

*Note: Implied Market Cap & P/E are calculated at upper price band of Rs500

Issue Allocation	
Reservations	% of Net Issue
QIB	50
NIB	15
Retail	35
Total	100
Employee Reservation: 2,028,342 equity shares	
TML shareholders reservation: 6,085,027 equity shares	

Object of the Offer
<ul style="list-style-type: none"> Achieve listing benefits on stock exchanges OFS of up to 60,850,278 equity shares by the selling shareholders

Industry Overview (contd.):

Growth Drivers:

(i) Shrinking innovation cycles: With technological evolution, the market is forced to produce more innovative products to meet consumer demand at a faster pace. This has led to shortened product lifespan and rapidly shrinking product innovation cycles. Over the period from 2022 to 2026, automakers are projected to introduce an annual average of 61 new models, which is 50% more than the average number of new models introduced in the preceding two decades.

(ii) Digital Thread: Digital technologies are changing the way the manufacturing sector is developing, building, and servicing products around the globe. These technologies create value by connecting machines through a 'Digital Thread' across the value chain thus making it possible to generate, securely organize, and draw insights from disparate sources of data. Product Lifecycle Management (PLM), Manufacturing Execution Systems (MES), and Enterprise Resource Planning (ERP) solutions are the fundamental aspects of product realization. The need for Digital Thread is further accentuated by macro factors like supply chain disruptions, capital re-allocation needs owing to demand swings, reconfiguration of management and manufacturing flows due to remote work and increasing focus on environmental impact of manufacturing.

(iii) Growing Product Complexity: Technology advancements are accelerating at a rapid pace across industries, leading to an increasing level of product complexity right from the development phase to aftermarket support. For example, in the automotive industry, digital technologies have percolated across the value chain in the wake of changing consumer patterns.

(iv) Advent of Generative AI: The rise of generative AI is spurring a wave of fresh investments as companies aim to enhance engineering efficiency and pioneer intelligent products and services. Generative AI carries profound transformative potential, ready to reshape entire industries. This surge in innovation is fueled by increased funding, paving the way for numerous cutting edge applications. This technology is on the verge of transforming business operations and products, heralding a new era of innovation and efficiency.

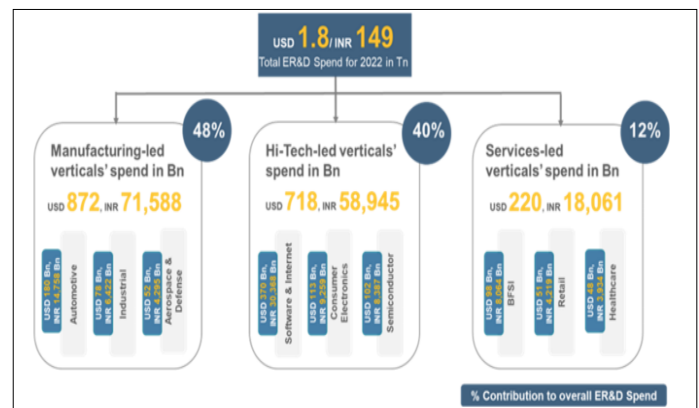
ER&D Spend Across Industry Verticals:

(i) Manufacturing-led verticals (automotive, industrial, aerospace, defense, etc.): Manufacturing-led verticals have been the largest contributors, and account for close to half of the global ER&D spending. In terms of the expenditure, the automotive sector is the largest manufacturing ER&D vertical, and the second largest ER&D vertical overall, accounting for ~ 10% of global ER&D spend for 2022.

(ii) Hi Tech-led verticals (Software & Internet, Semiconductor, Telecom): Hi Tech-led verticals currently account for 40% of the global ER&D spend. Software and internet is the largest ER&D vertical, accounting for ~ 20% of global ER&D spend and is among the fastest growing verticals.

(iii) Services-led verticals (BFSI, Healthcare Payers & Providers, Media & Entertainment): Services-led verticals account for 12%, primarily driven by digital engineering investments.

Exhibit 03: ER&D Expenses Across Verticals



Source: Company RHP, Progressive Research

Benefits of Outsourcing to Engineering Service Providers (ESPs):

Industry trends and technological advancements are transforming the way companies develop and manage products as well as their ability to provide engaging user experiences, leading to changes in business models, operations, and supply chains. As the pace of innovation accelerates, enterprises across industries are turning to trusted third-party ESPs for support. These service providers with comprehensive end-to-end capabilities that help enterprises upgrade and service existing products and processes, as well as develop new products and processes to better compete and drive competitive differentiation

- **Cost Savings:** Outsourcing reduces expenditure with set pre-defined expectations in terms of work description, compensation, and timelines
- **Flexibility:** Outsourcing helps with strategic utilization of resources. A resource can be billed when there is a definitive task that needs special support. Accordingly, both parties can draft their terms and work accordingly as per mutual consensus
- **Involvement:** Most outsourced tasks are independent of in-house core processes. The involvement is minimal and, on a task to task basis, where the brief is already outlined
- **Time and Scalability:** Outsourcing is highly scalable in terms of ad-hoc or hourly tasks. It is especially beneficial during peak times of the year, when work pressure is high and tasks are time-bound, among other things

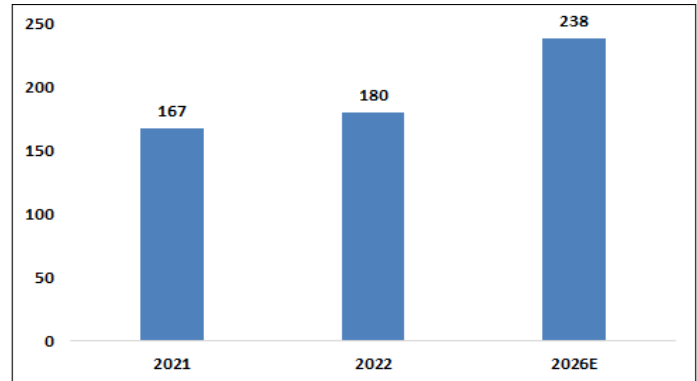
Industry Overview (contd.):

Global ER&D market across verticals:

(i) Automotive:

While traditional engineering services were restricted to the design and manufacturing portion of the value chain, digital technologies have expanded the scope of ER&D services to almost every segment across the value chain. While platform-based architecture, simulation-based analysis are key areas in the pre-manufacturing phase, ER&D services find enormous scope during manufacturing with services ranging from body and chassis design, to embedded workloads, all the way to validation and testing. The global automotive ER&D spend currently stands at USD180bn (estimated to grow approx. 7% CAGR to USD238bn by 2025), making it the largest contributor within the manufacturing sector, constituting roughly 10% of the overall ER&D spend. Digital engineering comprises of infotainment, telematics and connected, cloud engineering, digital thread initiatives, hybrid and electric

Exhibit 04: Automotive ER&D Spend (USD in bn)



Source: Company RHP, Progressive Research

technologies, embedded engineering, digital manufacturing, and digital twin-powered body design, among others. As the demand for autonomous and connected technologies rises, driven by regulatory pressures for passenger safety and cost considerations for OEMs, OEMs will maintain their commitment to providing improved and safer experiences to their clients through the integration of connected and autonomous technologies. Furthermore, in response to the escalating need to meet carbon emission targets, electrification is anticipated to take center stage in the automotive industry.

(ii) Aerospace and Defence:

The aerospace and defense industry is regaining growth momentum with an increase in travel demand across the globe and has been adopting new digital technologies to improve services to its customers. The ER&D spend for the aerospace and defense industry for the year 2022 stood at USD52bn and is estimated to reach USD62bn in 2026. Currently the highest spend comes from Europe, accounting for nearly 48% of the overall spend, followed by North America. France is a key geography, accounting for more than 20% of the overall ER&D spend in this industry. The top 10 aerospace ER&D spenders account for more than 65% of the overall spending of the industry. Aerospace enterprises are focusing on digitalization to reduce costs, including smart supply chain and predictive maintenance. Digital technologies are finding use cases all the way from asset tracking and inventory management and the ER&D service provider ecosystem is being leveraged for digital thread enablement. Aerospace tends to follow innovation in the Automotive vertical.

(iii) Transportation & Construction Heavy Machinery (TCHM):

The global TCHM ER&D spend was pegged at USD43bn in 2022 and is estimated to grow to USD49bn by 2026. The TCHM service provider outsourced ER&D market is currently pegged at USD2-3bn and is expected to grow to USD3-4bn by 2025. Mechanical design, and manufacturing engineering are the key outsourced sub segments for the TCHM industry. The TCHM industry is investing in various digital engineering initiatives to improve asset utilization and optimize performance. Key focus areas include smart factories, electrification, and connected equipment.

(iv) Education Services:

With the advent of Industry 4.0, there is an increasing need to equip engineers and technical staff with emerging skillsets. Studies by the World Economic Forum in 2021 indicated that 92% of the companies surveyed wished to reskill their employees. Although India has a robust talent supply, the need for skill development is imminent. This requires upskilling on a national scale, especially in the fields of engineering and technology. The need for upskilling is evident with studies showing that investments in upskilling could strengthen the country's economy by USD570bn and generate an additional employment of 2-2.5 million by 2030.

About the Company:

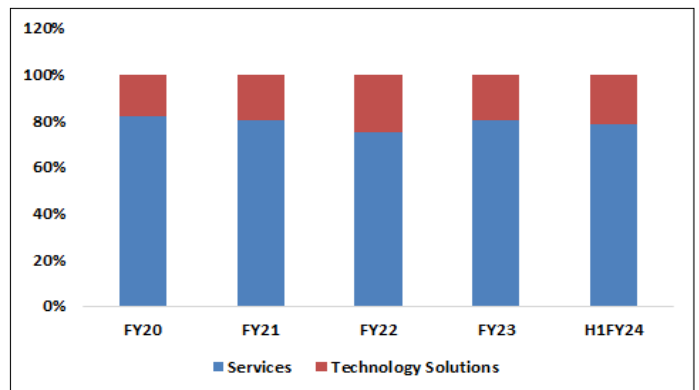
Tata Technologies Ltd (Tata Tech) is a leading global engineering services company offering product development and digital solutions, including turnkey solutions, to global OEMs and their tier 1 suppliers (Source: Zinnov Report). Tata Tech has a deep domain expertise in the automotive industry and leverage this expertise to serve its clients in adjacent industries, such as in aerospace and TCHM. As a subsidiary of Tata Motors Limited (TML), Tata Tech benefits from long-term relationships with both TML and JLR. The long-standing engagement with TML and JLR has enabled the incubation of skills and capabilities that has assisted the company in pursuing opportunities outside of the Tata Group. The company primarily categorizes the line of business into (i) Services (~79% of H1FY24 revenues) and (ii) Technology Solutions (~21% of H1FY24 revenues). Tata Tech is a pureplay manufacturing-focused ER&D company, primarily concentrating on the automotive industry and is currently engaged with 7 out of the top 10 automotive ER&D spenders and 5 out of the 10 prominent new energy ER&D spenders in 2022. As of Sep’ 23, the company has 19 global delivery centers spread across North America, Europe, and Asia Pacific, with each center staffed by a majority of local nationals, enabling the company to provide continuous services.

Business Segments:

Services: The services provides outsourced engineering services and digital transformation services to global manufacturing clients helping them conceive, design, develop and deliver better products.

Technology solutions: the company offers services with its products and education businesses (collectively, known as Technology Solutions). Through the products business, the company resells third party software applications, primarily product lifecycle management (PLM) software and solutions and provide value added services such as consulting, implementation, systems integration and support. On the other hand, the education business provides phygital education solutions in manufacturing skills including upskilling and reskilling in relation to the latest engineering and manufacturing technologies to public & private sector institutions.

Exhibit 05: Revenue Mix



Source: Company RHP, Progressive Research

Strengths:

(i) Deep expertise in the automotive industry: The company’s comprehensive portfolio of services for the automotive industry addresses the product development and enterprise optimization needs of traditional OEM’s and new energy vehicle companies, together with their associated supply chains. The automotive ER&D services span the entire automotive value-chain and includes concept design and styling, tear down and benchmarking (TDBM), vehicle architecture, body engineering, chassis engineering, virtual validation, ePowertrain, electrical and electronics, connected, manufacturing engineering, test and validation and vehicle launch. In addition to the spectrum of discrete service offerings, the company also offers turnkey full vehicle development solutions for traditional internal combustion engine (ICE) powered vehicles, plug-in hybrids (PHEV) and battery electric vehicles (BEV) which have been developed over a period of 10 years. The company’s long standing relationship with JLR since 2010, provides it with opportunities to cultivate skills and refine its value proposition for the automotive sector.

(ii) Differentiated capabilities in new-age automotive trends: The company’s end-to-end solutions for EV development, manufacturing, and after-sales services are designed to help OEMs develop competitive EVs while maintaining a balance between cost, quality and timelines. Its suite of product engineering solutions includes outsourced turnkey EV development, product benchmarking, electric vehicle modular platform (eVMP) for accelerating product development timelines, and its lightweighting framework can help OEMs develop products within competitive timelines.

(iii) Strong digital capabilities supported by proprietary accelerators: The portfolio of digital services and accelerators is designed to help OEMs and tier-1 suppliers manage the entire digital product life cycle and engage the customer throughout the product journey. The solutions leverage the deep manufacturing domain knowledge and intimate understanding of clients. Solutions and accelerators across new product introduction (NPI) increase the efficiency of automotive, TCHM and aerospace clients in introducing new products to the market.

(iv) Marquee set of clients across anchor accounts: The company has a diversified global presence across Asia Pacific, Europe, and North America and partners with many of the largest manufacturing enterprises in the world. As of September 30, 2023, clients consisted of more than 35 traditional automotive OEMs and tier-1 suppliers and over 12 new energy vehicle companies. The client portfolio includes its anchor clients, TML and JLR, leading traditional OEMs like Airbus, McLaren, Honda, Ford, and Cooper Standard, and tier-1 suppliers as well as new energy vehicle companies such as VinFast, among others such as Cabin Interiors and Engineering Solutions and ST Engineering Aerospace.

Strategies:

(i) Deepen engagements within existing client base: The company has significant opportunity within its client base to increase the use of product offerings and further develop deeper, long-term strategic partnerships. Currently, the top-20 clients by revenue attributable to the services segment account for ~88% of FY23 services revenue. It plans to drive further value by prioritizing the right high-potential accounts through strategic account planning.

(ii) Targets top ER&D spenders in select high-priority verticals and key geographies: The company aims to secure projects with the top ER&D spenders within the focus verticals of automotive, aerospace, and TCHM. According to Zinnov, automotive ER&D is highly concentrated among the top-20 companies, in terms of ER&D spend for 2022, which account for 73% of the global spend. It aims to strengthen its dedicated business development strategy to focus on high-potential accounts with large annual ER&D spends and new energy vehicle companies.

(iii) Expand capabilities in digital engineering and embedded systems: Tata Tech is focused on scaling up the embedded and digital and software-defined vehicle capabilities and offerings through investments and strengthening alliances as part of its diversification strategy. It is also focused on leveraging full turnkey product development capabilities related to EVs. It has also targeted large new projects to establish growth momentum and intends to expand the business through selective acquisitions that provide access to better technology, a broader geographical reach, capabilities, and key clients.

(iv) Strengthening service delivery through capacity and capability building: The company continues to work on strengthening the forecasting processes, resource management processes, and automation of non-core processes to enhance delivery excellence and strengthen pricing models that will enable margin improvement while creating value for all stakeholders. It is focused on building the talent supply chain to ensure that it fulfils client requirements at the right time and at the right cost.

Financials:

On the financial performance front, for the last three fiscals, Tata Tech (on a consolidated basis) posted a total income/net profit of Rs24,257.4mn/Rs2,391.7mn (FY21), Rs35,783.8mn/Rs4,370mn (FY22), and Rs45,019.3mn/Rs6240.4mn (FY23). For H1FY24, it earned a net profit of Rs3,519mn on a total income of Rs25,874.2mn. For the last three fiscals, the company has reported an average EPS of Rs12.26 and an average RoNW of 18.68%. The company has posted PAT margins of 10.05% (FY21), 12.38% (FY22), 14.14% (FY23), and 13.93% (H1FY24).

Exhibit 06: Financial Performance

Parameters (Rs mn)	FY21	FY22	FY23	H1FY24
Sales	23,809	35,295	44,142	25,267
EBITDA	3,857	6,456	8,209	4,648
EBITDA Margin %	16.2	18.3	18.6	18.4
PAT	2,392	4,369	6,240	3,519
PAT Margin %	10.0	12.4	14.1	13.9
EPS	5.9	10.8	15.4	8.7
RoNW (%)	11.2	19.2	20.9	12.3

Source: Company RHP, Progressive Research

Risks and Concerns:

- Higher client concentration exposes the company to deterioration in client's business
- Company derives/likely to derive significant revenue from new energy vehicle companies/startups; business continuity and growth depends on their success
- The company is subject to laws, rules and regulations related to system failures, disclosure of confidential information or data security breaches that are frequently evolving and may require it to incur additional expenses
- Cyclical nature of the automotive industry exposes the company to macro volatility
- Exchange rate fluctuations in various currencies in which Tata Tech do business could materially and adversely impact its business, financial condition and results of operations
- Success also depends on ability to innovate, and business could be adversely affected if Tata Tech fails to upgrade and adapt its services and solutions to evolving clients' requirements or if it fails to make changes to its pricing model to keep up with clients' expectations

Outlook and Recommendations:

Tata Tech is a leading global engineering services company that offers its product development and digital solutions to global OEMs and their tier-I suppliers. The offerings are focused on automotive, aerospace and TCHM. The intent is to accumulate the experience stack in order to conceptualize, develop and realise safer rather more sustainable products and experiences. Like stated earlier, in the automotive space (attributed ~88% of the service revenue for H1FY24), the company empowers auto manufacturers to design, engineer and validate products for a greener and a safer world while under the aerospace vertical, the company offers aerospace engineering solutions. The company enjoys the strong partnerships and alliances with Dassault, Logility, Siemens Industry Software Inc., Codincity and Fantasy that further augments to expand the client reach across verticals and geographies. As on Sept'23, Tata Tech has a diversified global clientele base with 19 delivery centres spread across North America, Europe and Asia Pacific. The company derived ~35%, ~27%, ~20% and ~18% of the H1FY24 revenue from clients in India, Europe, North America and the RoW, respectively. Tata is a household name in India and comes with the highest possible goodwill for a brand. Additionally, high repeat rate depicts deep and long-lasting relationships with clients (with a repeat rate of ~95-97%). On the financials, the revenues over the past financial years has seen a steady growth which is evident with the growth seen in the automotive and aerospace business. The PAT margin too is above 13%. This IPO will mark an IPO from the Tata Group after a gap of 19 years. The entire IPO is an OFS, so there won't be any fresh funds coming in; the OFS portion is being entirely offered by the promoter shareholders and the investor shareholders (currently the promoters-TML holds 64.79% stake in the company, which will get diluted to 53.39% post issue). If we attribute annualized FY24 earnings to post-IPO paid-up equity capital, then the asking price is at a P/E of 28.82x. Thus the IPO appears reasonably priced, as per Tata legacy. **The document is for information purpose. Backed by the goodwill and Tata legacy, the IPO is a good long term bet for the investors with regard to investment in the IPO.**

DISCLAIMERS AND DISCLOSURES-

Progressive Share Brokers Pvt. Ltd. and its affiliates are a full-service, brokerage and financing group. Progressive Share Brokers Pvt. Ltd. (PSBPL) along with its affiliates are participants in virtually all securities trading markets in India. PSBPL started its operation on the National Stock Exchange (NSE) in 1996. PSBPL is a corporate trading member of Bombay Stock Exchange Limited (BSE), National Stock Exchange of India Limited (NSE) for its stock broking services and is Depository Participant with Central Depository Services Limited (CDSL) and is a member of Association of Mutual Funds of India (AMFI) for distribution of financial products.

PSBPL is SEBI registered Research Analyst under SEBI (Research Analysts) Regulations, 2014 with SEBI Registration No. INH000000859. PSBPL hereby declares that it has not defaulted with any stock exchange nor its activities were suspended by any stock exchange with whom it is registered in last five years. PSBPL has not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has its certificate of registration been cancelled by SEBI at any point of time.

PSBPL offers research services to clients as well as prospects. The analyst for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

Other disclosures by Progressive Share Brokers Pvt. Ltd. (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company (s) covered in this report:-

- PSBPL or its associates financial interest in the subject company: NO
- Research Analyst (s) or his/her relative's financial interest in the subject company: NO
- PSBPL or its associates and Research Analyst or his/her relative's does not have any material conflict of interest in the subject company. The research Analyst or research entity (PSBPL) has not been engaged in market making activity for the subject company.
- PSBPL or its associates actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of Research Report: NO
- Research Analyst or his/her relatives have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of Research Report: NO
- PSBPL or its associates may have received any compensation including for brokerage services from the subject company in the past 12 months. PSBPL or its associates may have received compensation for products or services other than brokerage services from the subject company in the past 12 months. PSBPL or its associates have not received any compensation or other benefits from the Subject Company or third party in connection with the research report. Subject Company may have been client of PSBPL or its associates during twelve months preceding the date of distribution of the research report and PSBPL may have co-managed public offering of securities for the subject company in the past twelve months.
- The research analyst has served as officer, director or employee of the subject company: NO
- Registration granted by SEBI and certification from NISM is in no way guarantee performance of the intermediary or provide any assurance of returns to investors

PSBPL and/or its affiliates may seek investment banking or other business from the company or companies that are the subject of this material. Our sales people, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses (if any) may make investment decisions that may be inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest including but not limited to those stated herein. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein. This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution publication, availability or use would be contrary to law or regulation or which would subject PSBPL or its group companies to any registration or licensing requirement within such jurisdiction. If this document is sent or has reached any individual in such country, especially, USA, the same may be ignored. Unless otherwise stated, this message should not be construed as official confirmation of any transaction. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of PSBPL. All trademarks, service marks and logos used in this report are trademarks or registered trademarks of PSBPL or its Group Companies. The information contained herein is not intended for publication or distribution or circulation in any manner whatsoever and any unauthorized reading, dissemination, distribution or copying of this communication is prohibited unless otherwise expressly authorized. Please ensure that you have read "Risk Disclosure Document for Capital Market and Derivatives Segments" as prescribed by Securities and Exchange Board of India before investing in Indian Securities Market. In so far as this report includes current or historic information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.

Terms & Conditions:

This report has been prepared by PSBPL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of PSBPL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and its at the discretion of the clients to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. PSBPL will not treat recipients as customers by virtue of their receiving this report.

Registered Office Address:

Progressive Share Brokers Pvt. Ltd,
122-124, Laxmi Plaza, Laxmi Indl Estate,
New Link Rd, Andheri West,
Mumbai—400053, Maharashtra
www.progressiveshares.com | Contact No.:022-40777500.

Compliance Officer:

Ms. Neha Oza,
Email: compliance@progressiveshares.com,
Contact No.:022-40777500.

Grievance Officer:

Email: grievancecell@progressiveshares.com