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Industry Research Report on Construction Equipment Sector in India

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Table of Contents

1 Economic Overview 6
1.1 Global Economy 6
1.1.1 Current State and Global GDP growth outlook 6
1.1.2 GDP details of developed countries/developing economies 6
1.1.3 Growth drivers and key issues impacting the growth of the global economy 7
1.2 Indian Economic Outlook 8
1.2.1 GDP Growth and Outlook 8
1.2.2 Fiscal Deficit (as a % of GDP) 9
1.2.3 Consumer Price Index 10
1.2.4 GVA in the Industrial Sector 11
1.2.5 Industrial Growth 12
1.2.6 Trade Dynamics 12

2 Construction Equipment Market 14
2.1 Domestic Construction Equipment market 14
2.2 Cost Advantages and Rising Technological Innovations 17
2.3 Growing domestic Construction Equipment production supporting used equipment quality catering to Developing and developed countries 18
2.4 Growing Opportunity for increase in availability of used and new construction equipment for purchase and sale as overall growth of economy and industry 18
2.5 Growth Drivers 19
2.6 Export Promotion and Incentives Scheme by Government of India 21

3 Global Used Construction Equipment Market 23
3.1 Market size of Global Used Construction Equipment Market 23
3.2 Type of Equipment 24
3.3 Drivers and Challenges 24
3.4 Business Model for Used, Refurbished, New, and Customized Construction Equipment 25

4 Global Backhoe Loader Market 28
4.1 Market Size of Global Backhoe Loader Market 28
4.2 Market Size by Region 29
4.2.1 North America 29
4.2.2 APAC 30
4.2.3 Europe 31
4.2.4 South America 32
4.2.5 Middle East and Africa 33
4.3 Drivers and Challenges 34

5 Engineering Goods Sector 36
5.1 Overview 36
5.2 Trade Dynamics 37
5.3 Key Drivers and Challenges 41
5.4 Major Manufacturing Hubs in India 43

6 Indian Capital Goods Market 45
6.1 Overview 45
6.2 Trade Dynamics 46

6.3 Key Drivers and Challenges 48

7 Company Profile of Jinkushal Industries Limited 50
7.1 Business Profile 50
7.2 Distribution channel and USP of the company 50
7.3 Product Offering of the company 52
7.4 Export of Non-OEM Construction equipment 53

8 Competitive Landscape 54
8.1 Jinkushal Industries Limited 54
8.2 Action Construction Equipment Limited 54
8.3 Vision Infra Equipment Solution Limited 55
8.4 Bull Machines Pvt Limited 56

List of Charts

Chart 1: Global Growth Outlook Projections (Real GDP, Y-o-Y change in %) 6
Chart 2: Trend in Real Indian GDP growth rate 9
Chart 3: Gross Fiscal Deficit (% of GDP) 10
Chart 4: Retail Price Inflation in terms of index and Y-o-Y Growth in % (Base: 2011-12=100) 10
Chart 5: RBI historical Repo Rate 11
Chart 6: Y-o-Y growth in IIP (in %) 12
Chart 7: Merchandise Trade dynamics 13
Chart 8: Segment wise Sale Units 16
Chart 9: Domestic sales and Exports of Construction Equipment 16
Chart 10: Capital Expenditure for the industries which use construction equipment in budget 2025-26 20
Chart 11: Used Construction Equipment Market size 23
Chart 12: Market Size of Global Backhoe Loader Market (In USD Billion) 29
Chart 13: Market Size of North America Backhoe Loader market (In USD Billion) 30
Chart 14: Market Size of APAC Backhoe Loader market (In USD Billion) 31
Chart 15: Market Size of Europe Backhoe Loader market (In USD Billion) 32
Chart 16: Market Size of South America Backhoe Loader market (In USD Billion) 33
Chart 17: Market Size of Middle East and Africa Backhoe Loader market (In USD Billion) 34
Chart 18: Indian Engineering Goods Import-Export 37
Chart 19: Overall Merchandise Export vs Overall Engineering Exports 39
Chart 20: Region-wise share of India's engineering exports during FY23 and FY24 41
Chart 21: Import-export by sub-sectors in FY24 (Rs '000 Crores) 46
Chart 22: Business Model 50
Chart 23: USP of the company 51
Chart 24: Export of Construction Equipment by Non-OEM players 53
Chart 25: Comparison of Revenue from Operations (In Rs. Million) 57
Chart 26: Comparison of EBITDA (In Rs. Million) 58
Chart 27: Comparison of EBITDA Margin (In %) 58
Chart 28: Comparison of PAT (In Rs. Million) 59
Chart 29: Comparison of PAT Margin (In %) 59
Chart 30: Comparison of ROA (In %) 60
Chart 31: Comparison of ROE (In %) 60
Chart 31: Comparison of ROCE (In %) 61

Chart 33: Comparison of D:E Ratio (In Times) 61
Chart 34: Comparison of Net Debt (In Rs. Million) 62

List of Tables

Table 1: GDP growth trend comparison - India v/s Other Economies (Real GDP, Y-o-Y change in %) 6
Table 2: RBI's GDP Growth Outlook (Y-o-Y %) 9
Table 3: Industrial sector growth (Y-o-Y growth) -at Constant Prices 11
Table 4: Categories of Construction equipment 14
Table 5: Production across different equipment categories 17
Table 6: Various Categories of Products Exported 38
Table 7: Product panel wise India's engineering exports 40
Table 8: Trend in production of Capital goods in India (Rs crores) 45
Table 9: Trend in import of Capital Goods in India (Rs crores) 47
Table 10: Trend in exports of Capital Goods in India (Rs crores) 47
Table 11: Product Portfolio 52

1 Economic Overview

1.1 Global Economy

1.1.1 Current State and Global GDP growth outlook

Global growth, which reached 3.5% in CY23, stabilized at 3.3% for CY24 and projected to decrease at 3.0% for CY25. Global trade is expected to be disrupted by new US tariffs and countermeasures from trading partners, leading to historically high tariff rates and negatively impacting economic growth projections. The global landscape is expected to change as countries rethink their priorities and policies in response to these new developments. Central banks priority will be to adjust policies, while smart fiscal planning and reforms are key to handling debt and reducing global inequalities.

Chart 1: Global Growth Outlook Projections (Real GDP, Y-o-Y change in %)

	CY20	CY21	CY22	CY23	CY24	CY25P	CY26P	CY27P	CY28P	CY29P	CY30P
World	-2.7%	6.6%	3.6%	3.5%	3.3%	3.0%	3.1%	3.2%	3.2%	3.2%	3.1%
Advanced Economies	-4.0%	6.0%	2.9%	1.7%	1.8%	1.5%	1.6%	1.7%	1.7%	1.7%	1.7%
Emerging Market and Developing Economies	-1.7%	7.0%	4.1%	4.7%	4.3%	4.1%	4.0%	4.2%	4.1%	4.1%	4.0%

Source: IMF – World Economic Outlook, July 2025; Notes: P-Projection

1.1.2 GDP details of developed countries/developing economies

Table 1: GDP growth trend comparison - India v/s Other Economies (Real GDP, Y-o-Y change in %)

	Real GDP (Y-o-Y change in %)										
	CY20	CY21	CY22	CY23	CY24	CY25P	CY26P	CY27P	CY28P	CY29P	CY30P
India	-5.8	9.7	7.6	9.2	6.5	6.4	6.4	6.5	6.5	6.5	6.5
China	2.3	8.6	3.1	5.4	5.0	4.8	4.2	4.2	4.1	3.7	3.4
Indonesia	-2.1	3.7	5.3	5.0	5.0	4.8	4.8	4.9	5.0	5.1	5.1
Saudi Arabia	-3.6	5.1	7.5	-0.8	1.3	3.6	3.9	3.6	3.2	3.2	3.3
Brazil	-3.3	4.8	3.0	3.2	3.4	2.3	2.1	2.2	2.3	2.4	2.5
Euro Area	-6.0	6.3	3.5	0.4	0.9	1.0	1.2	1.3	1.3	1.2	1.1
United States	-2.2	6.1	2.5	2.9	2.8	1.9	2.0	2.0	2.1	2.1	2.1
Middle East	-2.2	4.4	5.5	2.2	2.4	3.4	3.5	4.0	3.7	3.7	3.7
Latin America	-6.9	7.4	4.2	2.4	2.4	2.2	2.4	2.7	2.7	2.7	2.6

Source: IMF- World Economic Outlook Database (July 2025)

Note: P- Projections, E-Estimate; India's fiscal year (FY) aligns with the IMF's calendar year (CY). For instance, FY24 corresponds to CY23.

1.1.3 Growth drivers and key issues impacting the growth of the global economy

Growth Drivers

- **Technological Advancement**

Technological advancements are a key driver of global economic growth, transforming industries, enhancing productivity, and creating new market opportunities. The rapid adoption of Industry 4.0 technologies, including AI, IoT, and cloud computing, is optimizing manufacturing, improving decision-making, and enabling digital transformation across sectors such as healthcare, finance, and logistics. The expansion of 5G networks is accelerating connectivity, supporting smart cities, and boosting e-commerce penetration. Additionally, fintech innovations in digital payments, blockchain, and decentralized finance (DeFi) are reshaping global financial services, enhancing financial inclusion, and streamlining transactions. The transition to clean energy technologies, including solar, wind, and electric vehicles (EVs), is driving sustainable economic growth while reducing reliance on fossil fuels.

- **Infrastructure Development**

Infrastructure development is a fundamental driver of global economic growth, facilitating industrial expansion, enhancing connectivity, and boosting productivity. Investments in transportation networks, energy systems, and digital infrastructure create a strong foundation for economic activities, attracting investments and improving efficiency across industries. Mega projects such as China's Belt and Road Initiative (BRI) and the U.S. Infrastructure Investment Plan are driving large-scale infrastructure expansion, strengthening trade corridors, and supporting regional integration. The rapid urbanization and smart city initiatives worldwide are increasing demand for modernized transport, sustainable housing, and efficient utilities, further stimulating growth.

- **Rising consumer demand**

Rising consumer demand is a significant driver of global economic growth, fuelled by a rapidly expanding middle class, particularly in emerging markets across Asia and Africa. Increasing disposable incomes, urbanization, and changing consumption patterns are driving higher demand for consumer goods, real estate, healthcare, and financial services. The growth of e-commerce, digital payments, and fintech solutions is further accelerating consumer spending, enabling greater market penetration and enhancing accessibility to goods and services. Additionally, rising aspirations and a shift towards premiumization are creating opportunities for businesses to expand into high-value segments such as luxury goods, branded apparel, and personalized financial products. The demand for housing, infrastructure, and mobility solutions is also increasing, driving investments in real estate, transportation, and smart city initiatives.

- **Global Trade and investment**

Expanding trade agreements, foreign direct investment (FDI), and supply chain diversification strategies are crucial growth drivers of the global economy. Countries are increasingly focusing on trade liberalization and regional economic partnerships, such as the Regional Comprehensive Economic Partnership (RCEP) and the United States-Mexico-Canada Agreement (USMCA), to strengthen cross-border economic ties. These agreements reduce tariffs, encourage smoother trade flows, and create new opportunities for businesses to access larger markets. FDI continues to play a central role, facilitating the flow of capital, technology, and expertise into emerging markets, while enhancing industrial growth and global competitiveness. In parallel, supply chain diversification strategies are being adopted to mitigate risks associated with over-reliance on specific regions, ensuring more resilient and efficient global production networks.

Key issues impacting the growth of the global economy

- **Geopolitical Uncertainty**

Geopolitical uncertainty, marked by rising tensions between major economies such as the U.S.-China trade conflicts, Russia-Ukraine tensions, and instability in the Middle East, poses significant challenges to global economic growth. These geopolitical issues disrupt global supply chains, creating bottlenecks and delays in the production and delivery of goods. The uncertainty surrounding trade policies, sanctions, and military conflicts leads to increased market volatility, making it difficult for businesses to plan and forecast effectively. Additionally, geopolitical instability deters foreign direct investment (FDI), as investors seek safer, more predictable markets. The overall effect of these tensions is a dampened global economic outlook, as businesses face higher costs, reduced confidence, and diminished prospects for growth.

- **Inflationary pressure**

Inflationary pressures are a critical challenge to global economic growth, driven by supply chain disruptions, energy price volatility, and labour market imbalances. Rising prices erode purchasing power, reducing consumers' ability to spend on goods and services, which in turn dampens overall economic demand. Additionally, increased inflation leads to higher borrowing costs as central banks raise interest rates to curb price increases, further stifling both business investment and consumer spending. These inflationary pressures create a cycle of economic uncertainty, with businesses facing increased operational costs, reduced margins, and the need to adapt to changing market conditions.

- **Interest Rate hikes**

Interest rate hikes by central banks worldwide, as part of efforts to combat rising inflation, present significant challenges to global economic growth. Higher interest rates increase the cost of borrowing, making it more expensive for businesses to secure financing for expansion and for consumers to obtain credit. This slowdown in investment activity can stifle innovation and economic development. The impact is particularly pronounced in emerging markets, where high debt burdens exacerbate the effects of rising borrowing costs, potentially leading to financial instability and slower growth. As central banks tighten monetary policy, the resulting economic pressures reduce overall demand, slow down consumer spending, and limit the flow of capital into growth sectors, creating headwinds for global economic recovery.

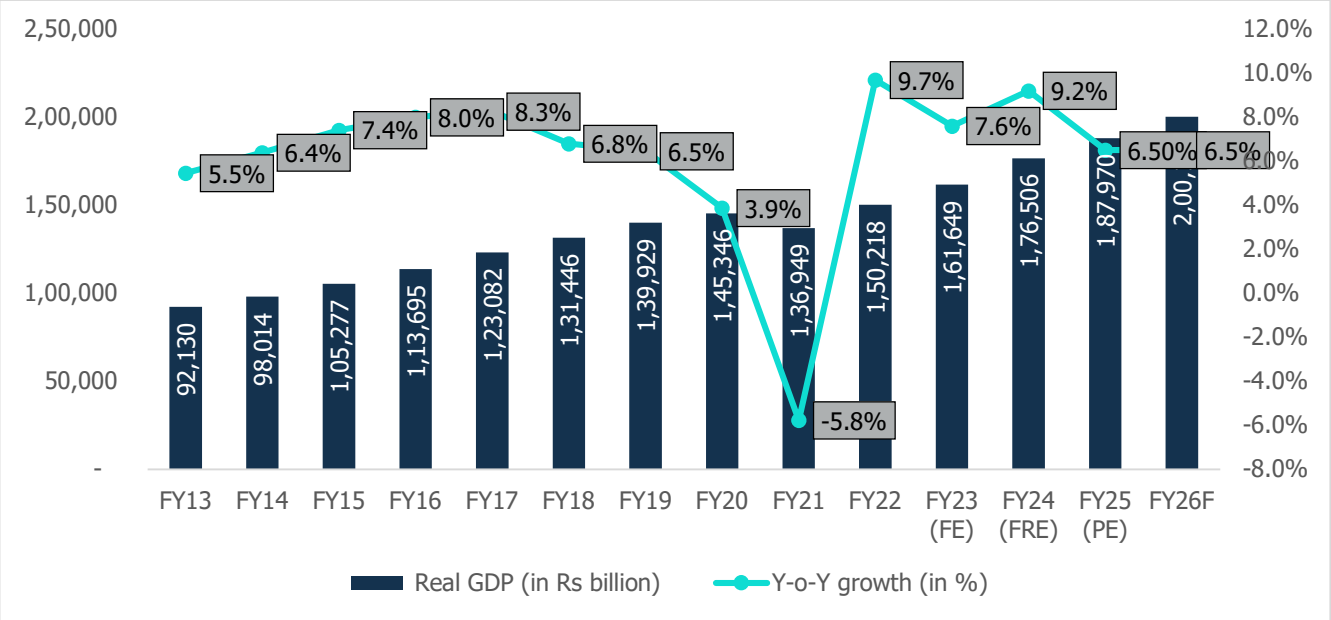
1.2 Indian Economic Outlook

1.2.1 GDP Growth and Outlook

Resilience to External Shocks remains Critical for Near-Term Outlook

India's real GDP grew by 9.2% in FY24 (Rs. 176,506 billion) which is the highest in the previous 12 years (excluding FY22, on account of end of pandemic) and as per provisional estimates, it grew at 6.5% in FY25 (Rs. 187,970 billion), driven by double digit growth particularly in the Manufacturing sector, Construction sector and Financial, Real Estate & Professional Services. This growth is also led by private consumption increasing by 7.6% and government spending increasing by 3.8% Y-o-Y. Real GDP growth is projected at 6.5% in FY26 as well, driven by strong rural demand, improving employment, and robust business activity.

Chart 2: Trend in Real Indian GDP growth rate



Note: FRE – First Revised Estimates, PE – Provisional Estimate, FAE- First Advance Estimates; Source: MOSPI

GDP Growth Outlook (August 2025)

FY26 GDP Outlook: The RBI projects real GDP growth at 6.5% for 2025–26, driven by strong private consumption, steady investment, and resilient rural and urban demand. A favourable monsoon, robust services sector and improving corporate balance sheets support this outlook.

However, risks from prolonged geopolitical tensions, global trade disruptions, and weather-related uncertainties remain. Taking these into account, the RBI has reaffirmed its growth projections.

Table 2: RBI's GDP Growth Outlook (Y-o-Y %)

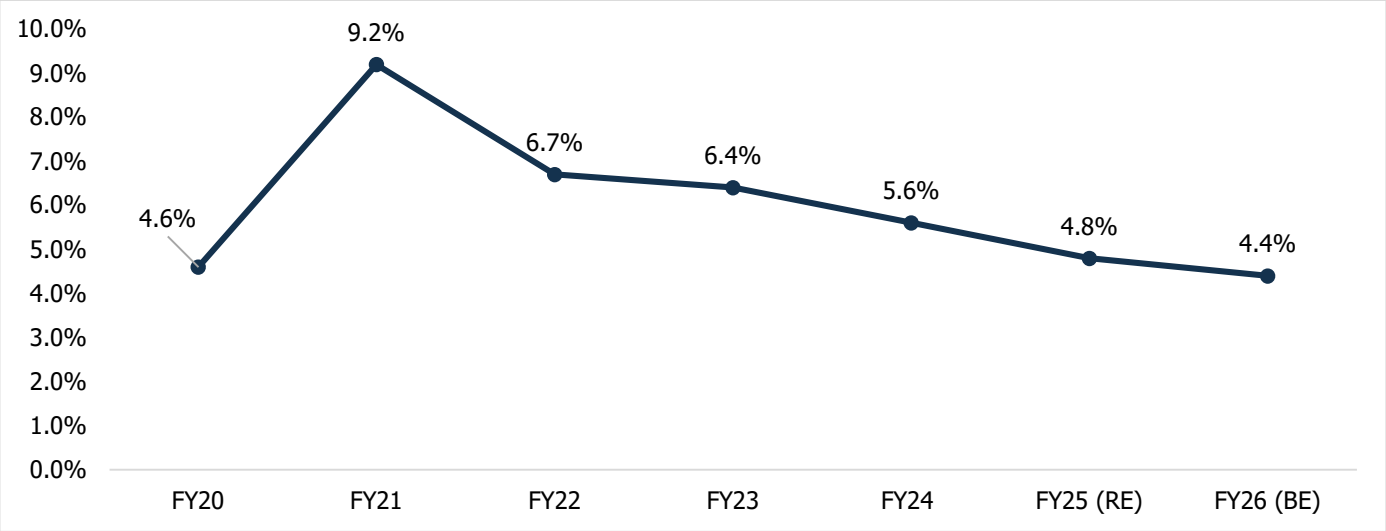
FY26P (complete year)	Q1FY26P	Q2FY26P	Q3FY26P	Q4FY26P	Q1FY27P
6.5%	6.5%	6.7%	6.6%	6.3%	6.6%

Note: P-Projected; Source: Reserve Bank of India

1.2.2 Fiscal Deficit (as a % of GDP)

In FY21, India's fiscal deficit was 9.2% due to the impact of COVID-19, since then it has seen a steady improvement is expected to reduce to 4.8% of GDP FY25 (RE), driven by strong economic growth and higher tax and non-tax revenues. The government aims for further fiscal consolidation, setting a target of 4.4% of GDP for FY26 to maintain fiscal prudence.

Chart 3: Gross Fiscal Deficit (% of GDP)

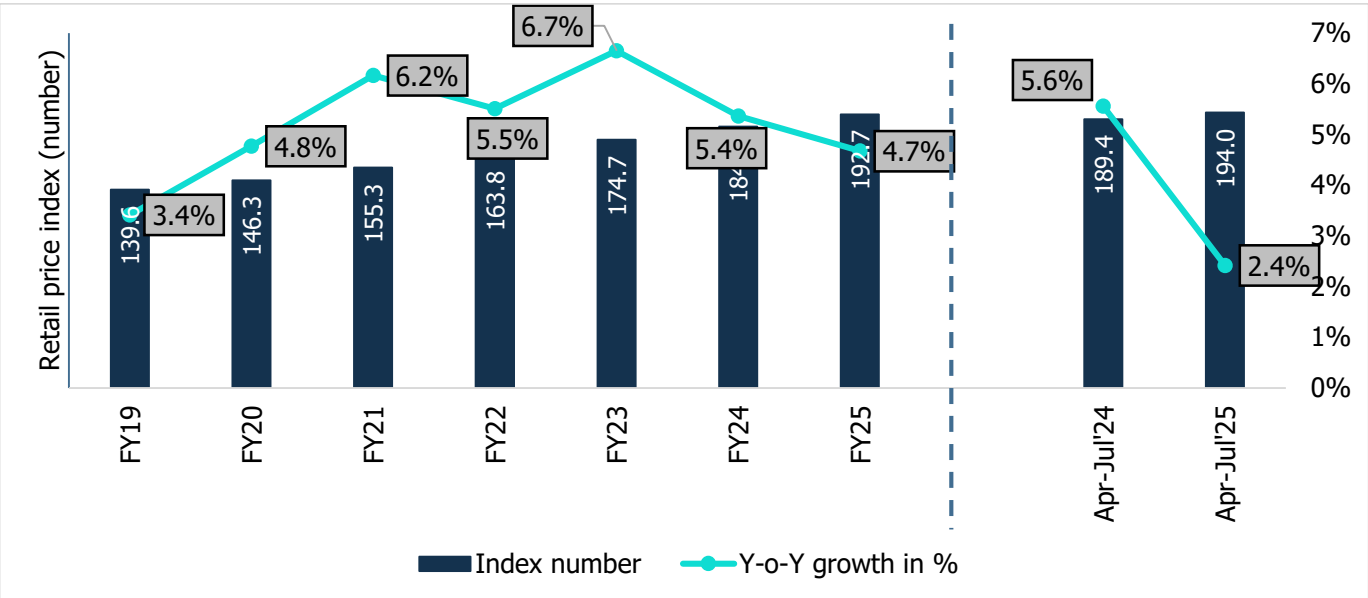


Note: RE-Revised Estimates, BE-Budget Estimates; Source: RBI

1.2.3 Consumer Price Index

The Consumer Price Index (CPI) for the April–July 2025 recorded a combined inflation rate of 2.4%, marking the lowest quarterly retail inflation in six years. The moderation was driven by continued declines in Pulses, Transport and communication, Vegetables, Cereal, Education, Egg and Sugar and confectionery.

Chart 4: Retail Price Inflation in terms of index and Y-o-Y Growth in % (Base: 2011-12=100)

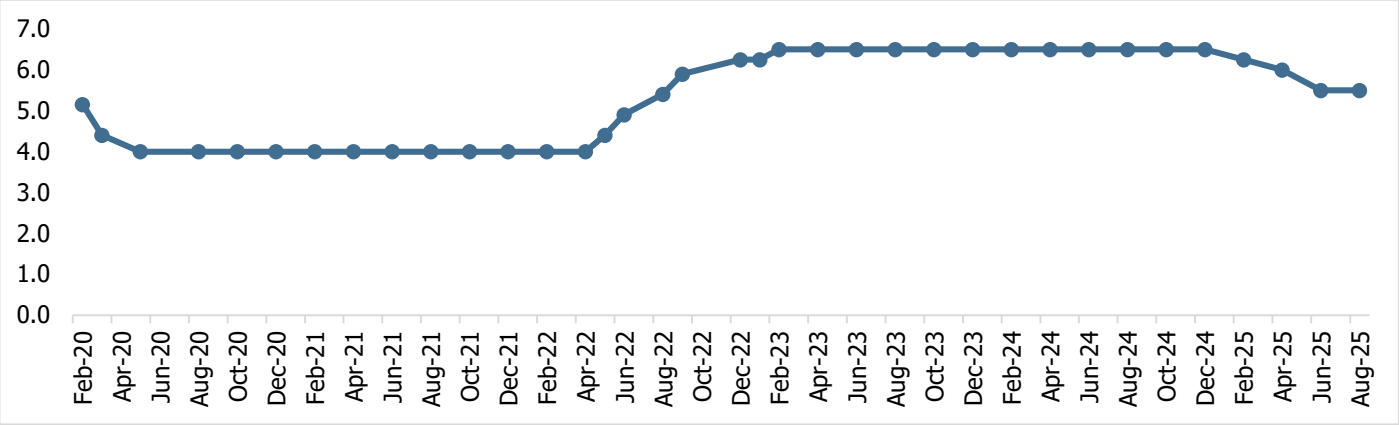


Source: MOSPI

The CPI is primarily factored in by RBI while preparing their bi-monthly monetary policy. At the bi-monthly meeting held in August 2025, RBI projected inflation at 3.1% for FY26 with inflation during Q2FY26 at 2.1% and Q3FY26 at 3.1%, Q4FY26 at 4.4% and Q1FY26 at 4.9%.

Considering the current inflation situation, RBI has maintained the repo rate to 5.5% in the August 2025 meeting of the Monetary Policy Committee.

Chart 5: RBI historical Repo Rate



Source: RBI

Further, the central bank continued it's stance as 'accommodative'. With a decline in food inflation, the headline inflation moderated to 1.55% in July 2025.

The economic growth outlook for India is expected to maintain momentum, supported by private consumption and continued growth in fixed capital formation. The uncertainty regarding the global outlook has reduced given the temporary tariff stay and optimism with trade negotiations. However, global growth and trade has been revised downward due to weakened sentiments and lower growth prospects.

The RBI has adopted for a non-inflationary growth with the foundations of strong demand and supply with a good macroeconomic balance. The domestic growth and inflation curve require the policies to be supportive with the volatile trade conditions.

1.2.4 GVA in the Industrial Sector

India's industrial sector is expected to grow by 10.8% in FY24, reaching Rs. 31.56 trillion, supported by positive business sentiment, falling commodity prices, and government initiatives like production-linked incentives. In FY25, growth is expected to slow down to 5.9% y-o-y, down from 10.8% in FY24. The growth is driven primarily by manufacturing, construction, and utility services. The slowdown can be attributed to the manufacturing segment likely to grow at 4.5%, lower than the previous year's 12.3%.

Table 3: Industrial sector growth (Y-o-Y growth) -at Constant Prices

At constant Prices	FY19	FY20	FY21	FY22	FY23 (FE)	FY24 (FRE)	FY25 (PE)
Industry	**5.3**	**-1.4**	**-0.9**	**11.6**	**2.0**	**10.8**	**5.9**
Mining & Quarrying	-0.9	-3.0	-8.6	7.1	2.8	3.2	2.7
Manufacturing	5.4	-3.0	2.9	11.1	-3.0	12.3	4.5
Electricity, Gas, Water Supply & Other Utility Services	7.9	2.3	-4.3	9.9	11.5	8.6	5.9
Construction	6.5	1.6	-5.7	14.8	10.0	10.4	9.4
GVA at Basic Price	**5.8**	**3.9**	**-4.2**	**8.8**	**7.4**	**8.6**	**6.4**

Note: FRE – First Revised Estimates, PE – Provisional Estimate, FAE- First Advance Estimates; Source: MOSPI

1.2.5 Industrial Growth

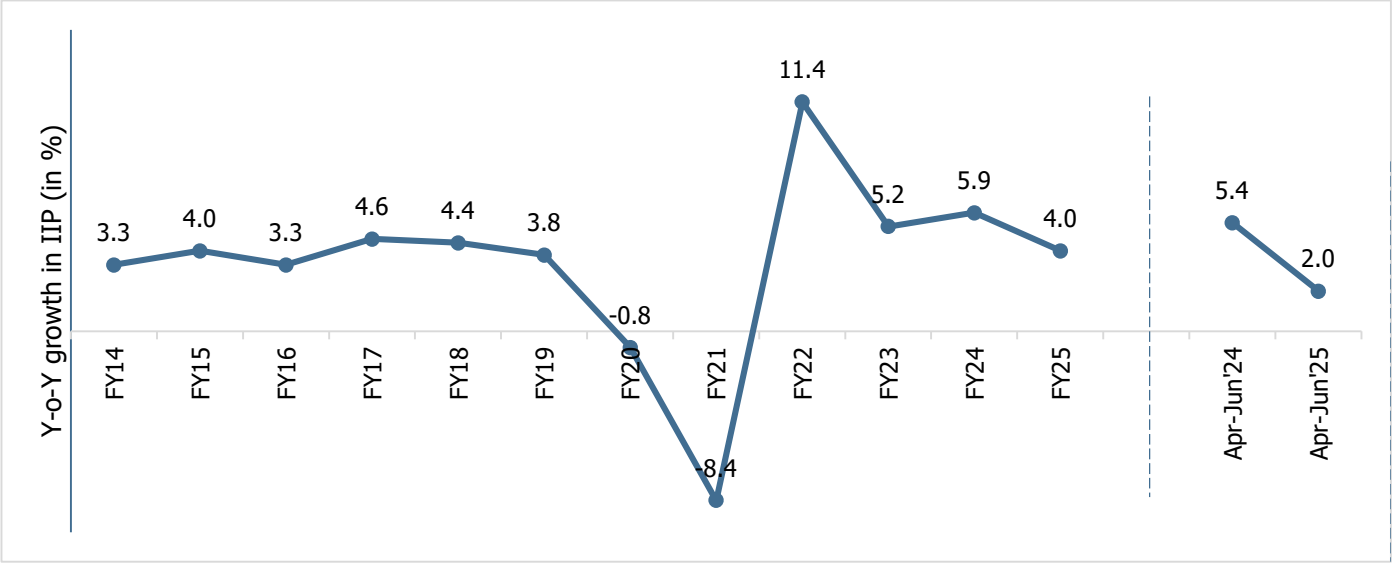
The Quick Estimates of the Index of Industrial Production (IIP) for May 2025 show a growth of 1.2%, compared to 2.7% in April 2025. The year-on-year moderation reflects weakness across major segments, primarily due to contractions in electricity, mining, and consumer non-durables.

In June 2025, industrial growth was supported by Manufacturing (2.6%), while Electricity declined by 5.8% and Mining contracted marginally by 0.1%. Within manufacturing, notable growth was recorded in basic metals, machinery and equipment, and non-metallic mineral products. Specifically, these segments helped offset broader weakness.

Use-based indices reflected mixed trends, with strong growth in Capital Goods (14.1%) and Infrastructure Goods (6.3%), but declines in Consumer Durables and Non-Durables indicating subdued consumption.

Manufacturing output grew by 3.4%, contributing significantly to overall industrial growth. This was primarily driven by strong performance in segments such as pharmaceuticals, motor vehicles, beverages, and electrical equipment.

Chart 6: Y-o-Y growth in IIP (in %)



Source: MOSPI

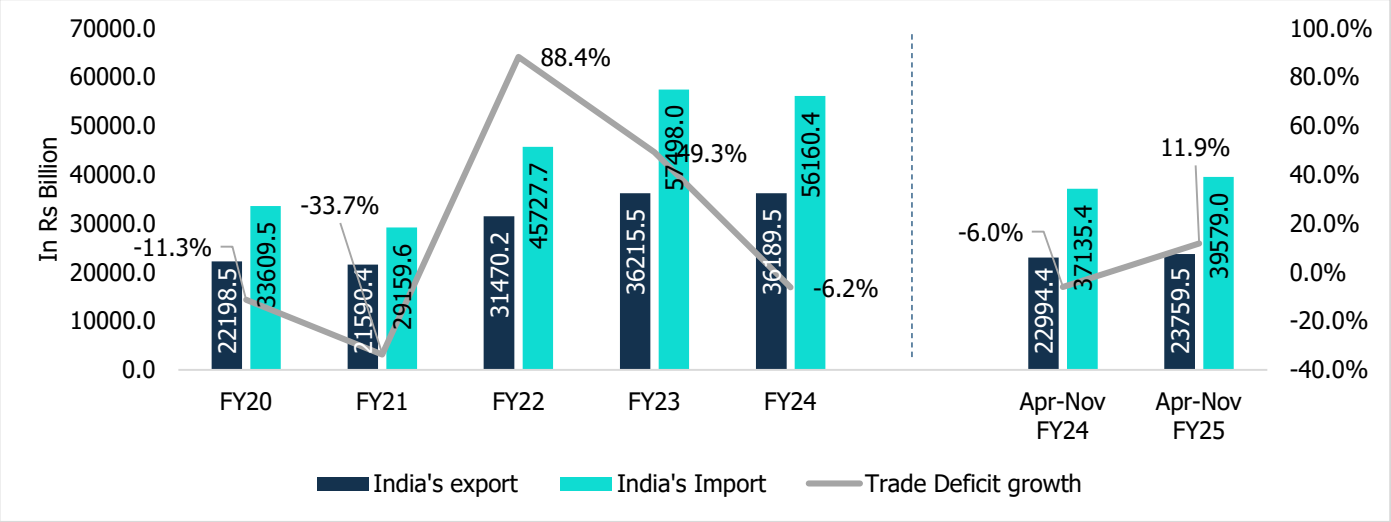
1.2.6 Trade Dynamics

India's merchandise trade has exhibited significant fluctuations over the past five fiscal years, influenced by both global and domestic economic conditions. Merchandise exports have demonstrated a strong growth trajectory, recording a 45.7% year-on-year (y-o-y) increase in FY22 and 15.1% growth in FY23. However, in FY24, exports marginally declined by 0.1% to Rs. 36,189.5 billion, compared to Rs. 36,215.5 billion in FY23, indicating a stabilization in outbound trade performance. On the import front, a similar trend was observed, with imports registering a 56.8% y-o-y increase in FY22 and 25.7% growth in FY23, primarily driven by rising domestic demand and higher commodity prices. In FY24, imports slightly declined by 2.3% to Rs. 56,160.4 billion, likely due to a moderation in crude oil prices and government measures aimed at curbing non-essential imports.

For the April–November period of FY25, imports stood at Rs. 39,579.0 billion, while exports reached Rs. 23,759.5 billion, reflecting the continued trend of India being a net importer of merchandise, with imports consistently exceeding exports.

The merchandise trade deficit, which expanded significantly in FY22 (88.4%) and FY23 (49.3%), witnessed a 6.2% contraction in FY24, suggesting a potential rebalancing of trade dynamics.

Chart 7: Merchandise Trade dynamics



Source: Ministry of Commerce

2 Construction Equipment Market

2.1 Domestic Construction Equipment market

Mining is the process of extracting solid ores, materials, and substances from geological deposits. It is essential for providing metals, rare earth elements, uranium, coal, diamonds, building materials, stone, rock, and various important industrial chemicals and solids. The contemporary mining industry depends on heavy machinery and vehicles to explore economically significant mineral, ore, and chemical deposits, develop mines for access, and extract these resources for storage and processing. The infrastructure and construction sectors rely on a wide array of machines for tasks such as ground preparation, excavation, material transport, and laying materials in specific configurations, as well as earthmoving and road construction.

Consequently, this sector employs a diverse range of equipment. Construction equipment (CE) refers to heavy-duty vehicles specifically designed for construction activities, mainly focusing on earthwork, material handling, and processing tasks. This category includes various types of machinery, such as hydraulic excavators, wheel loaders, backhoe loaders, bulldozers, dump trucks, tippers, graders, pavers, asphalt drum wet mix plants, breakers, vibratory compactors, cranes, forklifts, off-highway dumpers (ranging from 20 to 170 tonnes), drills, scrapers, motor graders, and rope shovels.

Owing to the increased infrastructure and construction activities, the Construction Equipment (CE) industry in India is growing at a healthy pace. With a wide production capacity base, India is perhaps the only developing country, which is moving towards self-reliance in such highly sophisticated equipment. India has only a few, mainly medium and large companies in the organized sector who manufacture them. The technology barriers are high, and therefore the role of SME's is restricted to manufacture of components and some sub-assemblies. A robust infrastructure is essential for a country's development, improving living standards and greatly boosting gross domestic product (GDP), especially in developing countries like India. The construction industry is the second-largest employer in the nation, following agriculture. It also draws a significant portion of Foreign Direct Investment (FDI), coming in second to the services sector, and provided jobs for 73.4 million people in India during FY24. The infrastructure sector represents 30%-40% of the demand for construction activities, with industrial, residential, and commercial projects making up the rest.

Classification of Indian CE industry

The Indian CE market can be broadly divided into five main categories as given in following table. Of the five, earth moving equipment segment has the largest share accounting for 69% in the overall construction equipment category. This is because these machines perform various tasks such as soil grading, trench digging, demolition, dirt and rock removal, and foundation laying. Clearance of mining and construction (road building and real estate) projects in recent years have led the earth moving segment to occupy a major share of the construction equipment market, followed by material handling and concrete equipment.

Table 4: Categories of Construction equipment

Segment	Equipment Types	Application Sector
Earthmoving Equipment	Backhoe loader, Hydraulic excavator, Crawler excavator, Wheeled loader	Mining, Roads, Real Estate/Land Development, Power, Railways/Metros
Material Handling & Cranes	Pick and Carry cranes, Mobile Truck cranes, Rough Terrain cranes, Telescopic Handler	Erection work in projects, Power, Steel, Mining, Railway/metros, Roads
Road Construction equipment	Vibratory compactor, Concrete pavers, Asphalt Pavers, Hot mix plants, Bitumen plants	Highways & Rural roads, Airports, Land Reclamation, Motor Graders

Concrete equipment	Transit mixers, Self-loading concrete mixers and Batching Plants	Irrigation Canals, Road Construction, Building Construction, Airports, Railways/metros
Material processing	Compressors, Crushers, Screeners	Stone Quarries, Mining, Over ground blue metal crushing

Earth moving equipment segment is the largest segment with a share of 69% as per FY24 sales volumes. It mainly comprises of excavators (compact excavator, dredging, dragline excavator, front shovel and others), loaders (skip loader and wheel loader), backhoe loaders, construction tractors and others (grader, scraper, track loader and material handler etc.). Backhoe loaders, which comprise tractors, front shovel/bucket backhoes and small backhoes are most commonly used to move large amounts of earth or to dig foundations and landscape areas, account for 55% of the earth moving equipment segment. The Indian construction, mining equipment industry continues to be highly dependent on the backhoe loaders and hydraulic excavators. In India, backhoe loader is the equipment of choice during the progression from manual labour to mechanization.

Material handling equipment is the second largest segment with a share of 13.8% as per FY24 sales volumes. Cranes are the largest category within the material handling equipment. Mobile cranes are the third-largest sold construction equipment type in India, after backhoe loaders and excavators. The pick-and-carry cranes constitute more than 90% of the total mobile cranes market. The demand for pick-and-carry cranes is expected to continue due to the rise in the number of projects in different sectors. Meanwhile, the medium and heavy-duty mobile cranes are also finding traction in view of the number of upcoming projects in metro rail, expressways and bridges.

Road construction equipment market share in overall construction equipment is 4.9% as per FY24 sales volumes. Its sales largely depend on the infrastructure growth including highways, airports etc. where the government is pushing towards completions of ongoing projects and introducing new projects which in turn is expected to drive-up the demand for road construction equipment.

Concrete equipment accounts for 10.3% share as per FY24 sales volumes, being the third largest segment of the construction equipment and comprises of batching plants, concrete pumps, concrete mixers etc.

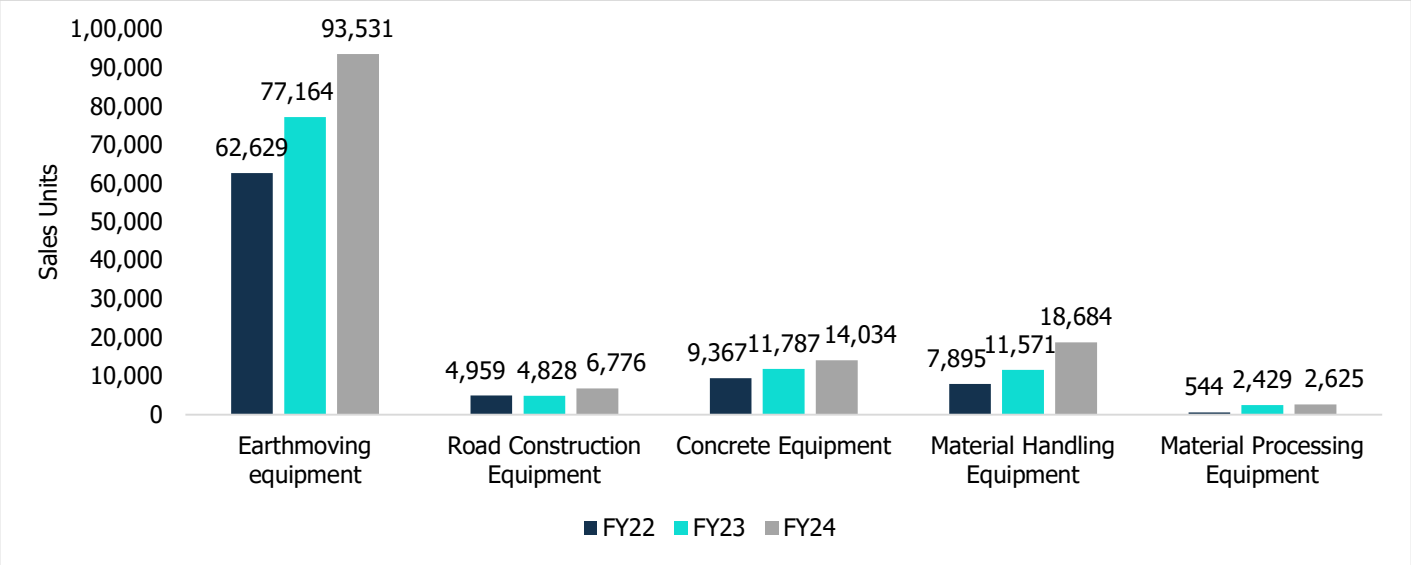
Material processing equipment account for 1.9% of the market as per FY24 sales volumes. Material processing equipment are used to transform raw materials into usable forms and components for construction projects and include compressors, crushers etc.

Performance of CE Industry

The growth of CE industry is interlinked with the growth of the Indian economy and the growth of infrastructure. The sector witnessed growth in the FY24 on account of increase in the construction activity in sectors, including urban development, rural sector, airports and ports, and an upswing in mining activity. As per Indian Construction Equipment Manufacturers Association (ICEMA), overall construction equipment sales volume grew by 26% y-o-y with 1,35,650 units in FY24 compared to 1,07,779 units in FY23. The growth was on account of rise in domestic sales by 24% y-o-y and 49% y-o-y growth in exports. Earthmoving, road construction equipment and material handling equipment saw a growth during the same period i.e. 21%, 40% and 61% respectively. Additionally, Material processing and concrete equipment registered a growth in sales, i.e. 8% and 19% respectively during same period.

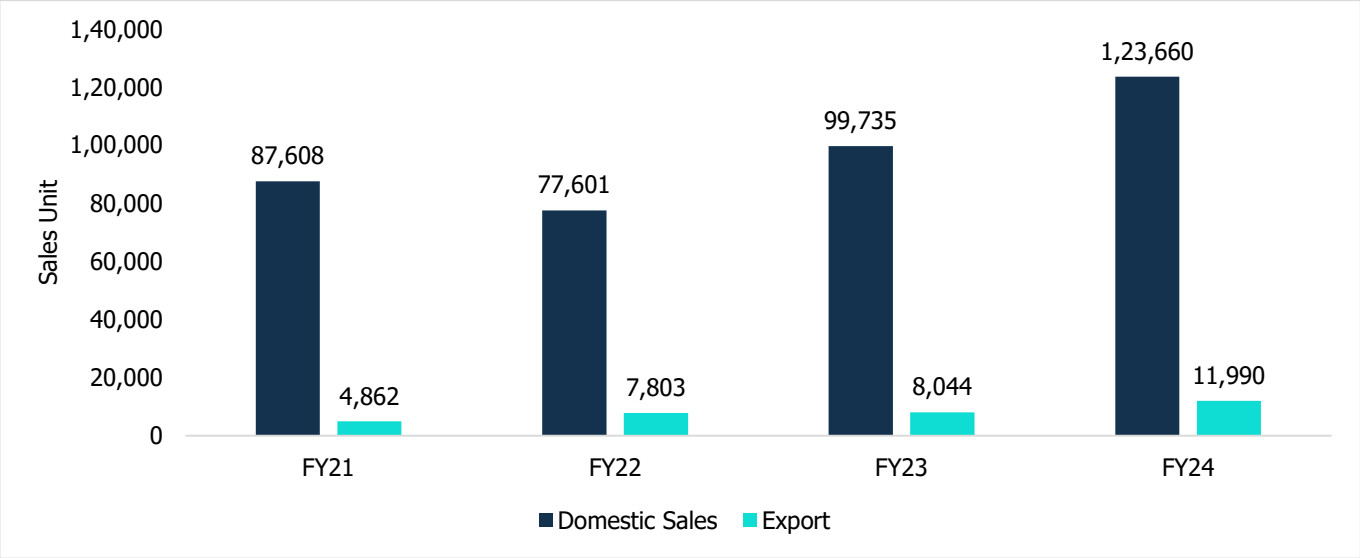
The enhanced pace of implementation of infrastructure projects already in the pipeline, particularly in the run-up to the General Elections, along with the awarding of a record number of new projects, resulted in a significant increase in demand for construction equipment. This was the primary factor behind the industry's growth, alongside increased construction activity in key sectors such as urban development, rural infrastructure, airports, ports, and mining.

Chart 8: Segment wise Sale Units



Source: Indian Construction Equipment Manufacturers Association (ICEMA)

Chart 9: Domestic sales and Exports of Construction Equipment



Source: Indian Construction Equipment Manufacturers Association (ICEMA)

Table 5: Production across different equipment categories

Particulars	Construction Machinery			Material Handling and Lifting Equipment			Mining Machinery
	Dumpers and Loaders	Concrete Mixers Lorries	Other Construction Machinery	Cranes	Material Handling & Lifting	Hydraulic Lifting	
	Nos	Nos	Rs. Crore	Tonnes	Rs. Crore	000 Nos	Rs. Crore
FY19	37,602.0	5,513.0	1,615.1	13,292.0	2862.1	741.9	357.1
FY20	29,781.0	4,303.0	1,211.3	9,848.6	2,774.0	500.7	240.1
FY21	27,802.0	4,001.0	577.1	6,408.7	2,395.3	446.3	131
FY22	27,219.0	6,489.0	749.7	8,044.1	2,481.6	595.1	105.3
FY23	33,906.0	7,808.0	1,000.8	8,899.1	2,517.5	590.6	132.6
FY24	39,101.0	10,200.0	1,212.9	14,521.0	2,879.0	716	191.9

Source: CMIE, CareEdge Research

In terms of volume growth, production of dumpers & loaders, concrete mixers lorries and cranes grew by 15%, 31% and 63% y-o-y respectively. In terms of value growth, other construction machinery grew by 21% y-o-y, mining machineries grew by 45% y-o-y and material handling & lifting equipment grew by 14% y-o-y. Additionally, hydraulic lifting grew by 21% in terms of volume during this period.

2.2 Cost Advantages and Rising Technological Innovations

Rising technological innovations in construction equipment are driving significant cost advantages for the industry by enhancing efficiency, reducing operational expenses, and improving project timelines. The integration of automation and artificial intelligence (AI) has led to the development of autonomous and semi-autonomous machinery, minimizing labour costs while improving precision and productivity. The adoption of telematics, GPS, and IoT-enabled equipment has further revolutionized the industry by providing real-time data on machine performance, location tracking, and predictive maintenance, thereby optimizing fuel consumption, reducing idle time, and preventing unexpected breakdowns.

Additionally, the shift towards electric and hybrid construction equipment is lowering long-term fuel expenses and emissions, while emerging hydrogen-powered machinery presents a cleaner alternative to diesel. Innovations such as 3D printing and modular construction are streamlining material usage and accelerating project completion, reducing waste and reliance on manual labour. Smart machinery, equipped with advanced sensors and AI-driven controls, enhances accuracy in excavation, loading, and material handling, further improving operational efficiency. Furthermore, the integration of Building Information Modelling (BIM) and digital twin technology allows for precise planning and real-time project simulation, minimizing rework and optimizing resource allocation. These advancements collectively contribute to cost efficiency, sustainability, and higher productivity, making technology adoption a critical factor in the evolution of the construction equipment industry.

At the same time, establishing overseas subsidiaries is providing construction equipment manufacturers with significant cost advantages in global expansion. By setting up operations in strategic locations, companies benefit from lower

manufacturing costs, reduced tariffs, and business-friendly regulatory environments that streamline compliance and reduce overhead expenses. Having an international presence enhances marketing and sales effectiveness, enabling localized branding, tailored customer engagement, and stronger distribution networks. A multi-country approach allows companies to diversify revenue streams, reduce dependency on a single market, and capitalize on regional demand shifts. By leveraging both technological advancements and the cost advantages of overseas subsidiaries, construction equipment manufacturers can achieve greater competitiveness, expand their global footprint, and drive sustainable growth in an increasingly dynamic industry.

2.3 Growing domestic Construction Equipment production supporting used equipment quality catering to Developing and developed countries

The growth of domestic construction equipment production is playing a crucial role in enhancing the quality of used equipment, enabling it to effectively cater to both developing and developed markets. Increased local manufacturing capabilities have led to improved production standards, advanced technological integration, and stringent quality control measures, resulting in longer equipment lifecycles and better-maintained used machinery. Consequently, the secondary market for construction machinery has become more trustworthy, providing high-quality used machines for resale. This is especially advantageous for developing countries, where affordable and reliable used equipment is crucial for infrastructure development and industrial growth. At the same time, developed economies benefit from access to high-quality refurbished machinery that complies with strict regulatory and environmental standards.

For instance, the production of dumpers, loaders, concrete mixers, and lorries registered a year-on-year growth of 23.8%, while in FY24, it grew by 18.2%. Similarly, the production of cranes witnessed a substantial year-on-year growth of 63.2%. This surge in domestic production not only meets rising domestic demand but also ensures a steady supply of high-quality used equipment to global markets. Additionally, advancements in predictive maintenance, telematics, and IoT-enabled diagnostics contribute to keeping used machinery in peak working condition, thereby increasing its market value. India is uniquely positioned to capitalize on this growing demand.

Developed markets require technologically advanced equipment with lower emissions, more sophisticated sensors, and electronic systems, while developing markets prioritize high productivity, ease of maintenance, and lower electronic complexity. With a robust manufacturing ecosystem, India can cater to both segments by producing cutting-edge machinery for advanced markets and cost-effective, durable solutions for emerging economies. As domestic production continues to grow, the availability of high-quality used equipment is likely to promote greater global adoption, solidifying the importance of used construction machinery in cost-effective and sustainable infrastructure development.

2.4 Growing Opportunity for increase in availability of used and new construction equipment for purchase and sale as overall growth of economy and industry

The overall growth of the economy and the construction industry is driving a significant increase in the availability of both new and used construction equipment for purchase and sale. Rising infrastructure investments, urbanization, and industrial expansion have fuelled higher demand for construction machinery, prompting manufacturers to scale up production and enhance their distribution networks. Simultaneously, the growing secondary market for used equipment is benefiting from improved asset quality, better maintenance practices, and advancements in technology such as telematics and predictive maintenance. As a result, buyers now have greater access to a diverse range of equipment that meets various operational and budgetary requirements.

The expanding availability of high-quality used construction machinery is particularly advantageous for cost-sensitive markets in developing economies, where refurbished equipment enables small and mid-sized contractors to undertake large-scale projects at a lower capital investment. Meanwhile, developed markets are witnessing increased demand for technologically advanced new equipment with improved efficiency, lower emissions, and enhanced automation features.

This dual growth in both new and used equipment markets is fostering a more dynamic and liquid industry, providing stakeholders with greater flexibility in procurement, leasing, and resale options.

Additionally, the increasing availability of trained technicians, specialized repair services, and a robust supply chain for components ensures the longevity and operational efficiency of both new and used machinery. As domestic production expands and equipment technology advances, this thriving ecosystem will play a crucial role in supporting the industry's growth, reinforcing India's position as a key global hub for construction machinery manufacturing, servicing, and resale. As economic growth continues to drive construction activities, the availability of both new and pre-owned construction equipment is expected to further expand, supporting the sector's overall sustainability and efficiency.

2.5 Growth Drivers

The prime drivers for this construction equipment segment in India are road construction, urban infrastructure, irrigation and real estate development.

Construction sector in India is the second largest employer and contributor to economic activity, after agriculture sector. The order book of construction companies is dependent upon the capital expenditure in the economy. Construction sector also accounts for most inflow of Foreign Direct Investment (FDI) after the services and computer software and hardware sector. Almost 30%-40% of the demand for construction activities in India comes from the infrastructure sector, while the rest comes from industrial activities, residential and commercial development etc.

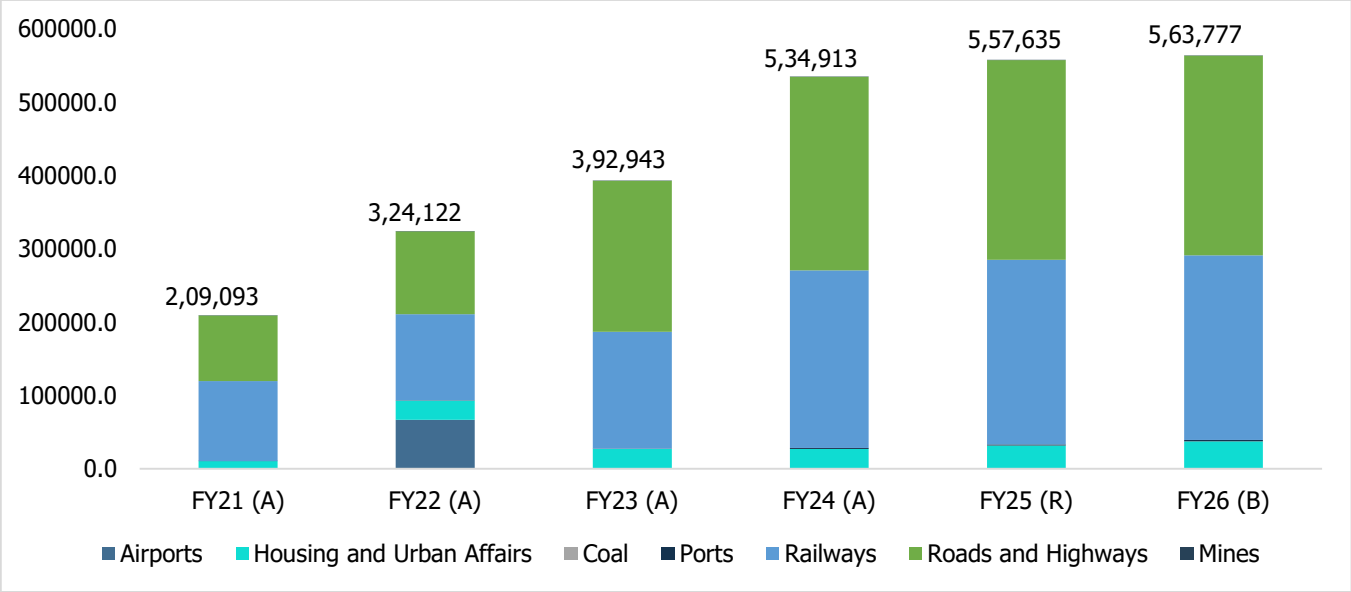
Historically, infrastructure creation, spread across sectors such as roads and highways, telecom, airports, ports, power, oil and gas and railways has dominated the investments. Increase in Infrastructure demand & government initiative shows the potential for catapulting India to the third largest construction market globally.

Industries which use construction equipment

Infrastructure is a crucial sector for the overall development of any country. In India, it is considered as the backbone of the country's economy as it integrates projects on a large scale and strengthens its competitiveness on a global level. The infrastructural facilities such as roads, railways, metro rails and so on are required to potentially increase the productivity and seamless functioning of other business sectors in India.

In the Union Budget 2025-26, the government continued its focus on infrastructure development with allocation of Rs. 5,63,777 crores towards capital expenditure for industries which use construction equipment (airports, housing and urban affairs, coal, ports, railways, roads and highways, mines), a 1.1% increase over revised estimates of 2024-25.

Chart 10: Capital Expenditure for the industries which use construction equipment in budget 2025-26



Source: Union Budget 2025-26 Analysis (includes Investment in PSU's) R - Revised, B - Budget

Airport

India has seen significant growth in the airport infrastructure sector with investments from both the government and private sector. The country has become the third-largest domestic civil aviation market in the world and has immense potential to grow further. Investment in airport infrastructure saw a sharp rise in FY22 (Rs. 66,927 crore), followed by a drastic decline in subsequent years. The allocation dropped significantly to Rs. 86.44 crore in FY23 and rose again to Rs. 755.18 crore in FY24. However, projected spending for FY25 is much lower, at Rs. 101.74 crore. The Ministry of Civil Aviation (MoCA) envisages 100 new airports to be built in the country over the next 10 to 15 years. To further improve regional air connectivity, the government has announced the revival of 50 additional airports, heliports, water aerodromes and advanced landing grounds and allocated Rs 70 crore in the Union Budget 2025-26. Further, the Government has envisaged an investment of more than Rs. 1,43,000 crores in airports under the National Infrastructure Pipeline (NIP) over a period of 5 years.

Roads

India has the second-largest road network in the world, spanning 66.71 lakh kilometers (km) and comprising National Highways, Expressways, State Highways, Major District Roads, Other District Roads, and Village Roads. Roads and highways represent the largest capital expenditure (Capex) segment, with investments rising from Rs. 89,194.82 crore in FY21 to Rs. 2,72,241.15 crore in FY26. This commitment to infrastructure development is reflected in the increase in highway construction from 10,993 km in FY23 to 12,349 km in FY24, marking a 12.3% growth. Despite a decline in new project awards, the pace of highway construction accelerated from 30 km/day in FY23 to 34 km/day in FY24. Looking ahead, the Government aims to expand the National Highway network by approximately 60,000 km by 2025, focusing on major economic corridors, strategic regions, and elevated corridors & flyovers in key metropolitan cities such as Delhi, Chennai, Kolkata, Mumbai, and Bengaluru. This expansion is part of the National Infrastructure Pipeline (NIP), with a planned investment of ₹20.33 lakh crore.

Railways

The Union Budget 2025-26 has allocated a capital expenditure allocation of Rs 2.52 lakh crore for the Railways in order to upgrade the railway systems in India. The thrust will be on the development of New DFC, RRTS, HSR Corridors and

upcoming metro sections in Tier 1 and Tier 2 cities which would benefit the Engineering, procurement, and construction (EPC) companies. The Ministry of Railways has planned to monetize assets including Eastern and Western Dedicated Freight Corridors after commissioning, induction of 150 modern rakes through PPP, station redevelopment through PPP, railway land parcels, multifunctional complexes (MFC), railway colonies, hill railways and stadiums. Under NIP, total capital expenditure of Rs 1,367,563 crore by both Centre and States would be made between FY20 to FY25. About 724 identified projects will be implemented in the period 2020-25. Out of the 724 projects, 697 projects worth Rs 11.97 lakh crore will be implemented through EPC mode, while 27 projects worth Rs 1.61 lakh crore will be implemented through PPP mode.

Real Estate

In FY24, the residential real estate market witnessed steady growth with increased sales momentum supported by past inventory levels and continued new project launches specifically in the affordable and mid-size segments. The housing market in general is seeing growth due to an increase in commercial activities, the need for upgraded infrastructure and living spaces, and an improved economic scenario. Growth in various sectors like BFSI and e-commerce segment, increase in savings because of work from home trend in the last 2 years and increase in demand for better spaces to live, have led to an increase in first-time home buyers. There is also an increase in the mid-segment housing projects due to increase in urbanization and per capita income. Government initiatives like Pradhan Mantri Awas Yojna (PMAY), Urban Development Plan and digitization of land records have also added to the growth in the sector. Rural and Urban housing construction under the Pradhan Mantri Awas Yojana has gained traction in FY24. Under the PMAY scheme of the Union Ministry of Housing and Urban Affairs, more than 118.64 lakhs houses have been sanctioned under the PMAY-Urban, out of which 90.43 lakhs have been completed as on February, 2025, and the rest are under construction. In addition to that, about 3.38 crore houses have been sanctioned under PMAY-Gramin out of which 2.69 crore have been completed.

In FY24, the commercial real-estate market witnessed a boom with healthy demand growth from office and retail segments, backed by strong growth in the e-commerce industry and India emerging as the fastest growing business and IT hub. The demand for office space will be driven by the expansion of the co-working segment, an increase in hiring across various sectors like e-commerce, services, etc., and increased connectivity due to augmentation of infrastructure and an overall sound economic growth in India. The absorption of commercial real estate in India is expected to remain healthy in the near to medium term.

2.6 Export Promotion and Incentives Scheme by Government of India

- **Remission of Duties and Taxes on Exported Products**

The Remission of Duties and Taxes on Exported Products (RoDTEP) scheme is a key initiative by the Government of India aimed at enhancing the global competitiveness of Indian exports, including construction equipment. Implemented on January 1, 2021, RoDTEP provides refunds on embedded Central, State, and local duties/taxes that are not reimbursed through other mechanisms, ensuring that Indian products remain cost-competitive in global markets. The scheme operates on the principle that exported goods should not carry domestic taxes, making Indian exports more attractive internationally. Rebates under RoDTEP are issued as transferable electronic scrips by the Central Board of Indirect Taxes & Customs (CBIC), which can be used to pay basic customs duties on imports or transferred to other importers. Exporters must indicate their RoDTEP claim details in the shipping bill, after which credit scrips are generated and managed through the ICEGATE portal. For the construction equipment industry, RoDTEP significantly reduces the cost burden, making Indian manufacturers more competitive globally.

- **Market Access Initiative Scheme**

The Market Access Initiative (MAI) Scheme is designed to enhance India's global trade presence by supporting exporters in accessing new markets and expanding their share in existing ones. For the construction equipment industry, the scheme plays a crucial role in facilitating market research, trade promotion, and brand positioning in international markets. The MAI scheme follows a "product-focus" and "country-specific" approach, ensuring that Indian construction equipment manufacturers can identify high-potential export destinations through market studies and surveys.

- **Custom Duty Drawback**

The Customs Duty Drawback Scheme is one of the key export incentives provided by the Government of India to enhance the global competitiveness of Indian manufacturers. The scheme allows exporters to claim a refund on customs duties, excise duties, and service taxes paid on imported raw materials, components, and inputs used in the production of exported goods. By reducing production costs, the scheme ensures that exported construction equipment remains price-competitive in international markets. Under this scheme, exporters can avail all-industry rate (AIR) or brand rate duty drawback, depending on whether standardized or specific duty incidence calculations apply. For the construction equipment industry, which relies on high-value components, duty drawback provides significant cost relief, making Indian-made equipment more competitive in regions such as Africa, the Middle East, and Southeast Asia, where infrastructure development is a priority.

- **Merchant Trade Transactions (MTT)**

Merchant Trade Transactions (MTT) refer to international trade where an Indian entity acts as an intermediary, purchasing goods from one foreign country and supplying them to another without the goods entering India's customs territory. The Foreign Trade Policy (FTP) of India, along with Reserve Bank of India (RBI) guidelines, facilitates MTT by providing a regulatory framework for seamless transactions. The policy ensures ease of doing business by allowing Indian exporters to engage in third-country trade, expanding their global reach without domestic manufacturing or warehousing. As per RBI regulations, payments for imports must be made from export proceeds, with a maximum time gap of nine months between the import and export leg, except for Special Economic Zones (SEZs). In industries like construction equipment, MTT enables Indian exporters to connect global manufacturers with infrastructure developers, leveraging India's strong trade networks.

By leveraging these export incentives, along with a well-developed aftermarket service ecosystem, construction equipment manufacturers can capitalize the opportunity of port potential for both used and refurbished construction equipment, as well as customized and new machinery, is expanding rapidly, driven by rising global infrastructure development and cost-conscious buyers. Developing economies, particularly in Africa, Southeast Asia, and Latin America, present strong demand for affordable, well-maintained used and refurbished equipment, enabling small and mid-sized contractors to undertake large-scale projects with lower capital investment. At the same time, developed markets seek high-performance, customized, and technologically advanced construction equipment that meets stringent regulatory and environmental standards. The increasing focus on sustainability and cost efficiency has also fuelled the demand for refurbished machinery, which extends equipment lifecycles and minimizes waste. Meanwhile, the export of customized and new construction equipment allows manufacturers to cater to region-specific requirements, incorporating advanced features such as telematics, automation, and eco-friendly technologies.

3 Global Used Construction Equipment Market

3.1 Market size of Global Used Construction Equipment Market

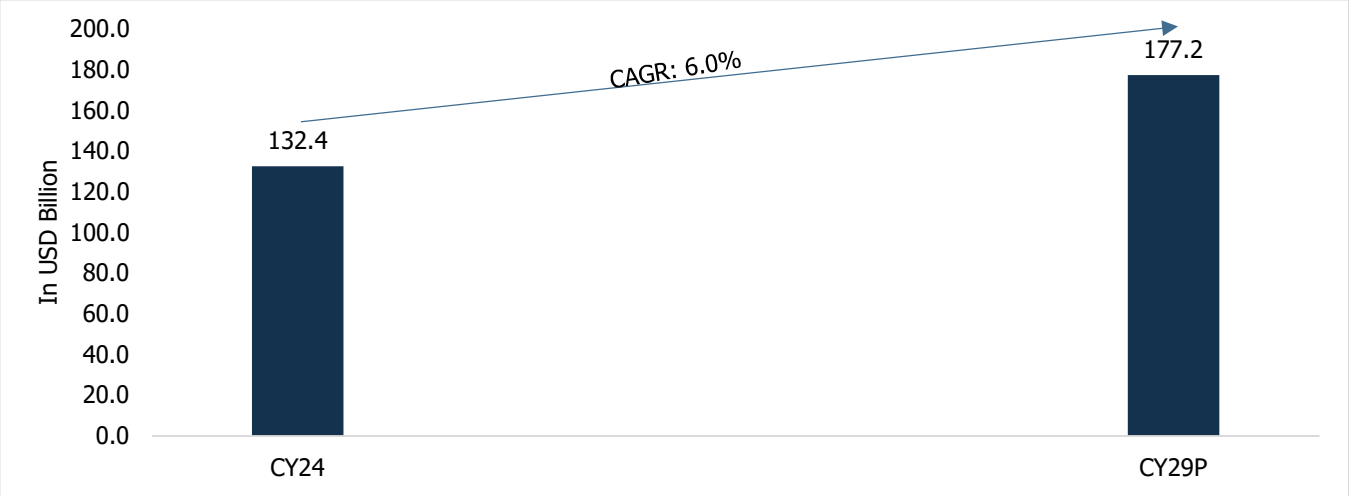
The global market for used construction equipment involves the buying and selling of pre-owned machinery and vehicles utilized in the construction sector, such as excavators, loaders, bulldozers, cranes, and more. This market includes equipment that has been returned from lease agreements, traded in for newer models, or sold after the completion of projects.

The used construction equipment market has shown consistent growth, with an estimated value of USD 132.4 billion in CY24. This growth is mainly fuelled by two significant factors: (a) the rise in infrastructure development and construction activities in emerging economies, and (b) the cost-effectiveness of used equipment compared to new machinery. Used construction equipment offers substantial cost savings, allowing businesses to obtain necessary machinery without the hefty capital investment that comes with new purchases. Furthermore, the increasing availability of well-maintained and refurbished equipment has enhanced market appeal, making used machinery an attractive option for companies looking to expand their fleet or replace older assets.

Looking forward, the market is expected to reach USD 177.2 billion by CY29, with a CAGR of 6.0% during the forecast period. This growth will be bolstered by the expansion of urban infrastructure projects, government investments in construction, and digital platforms that facilitate the resale and procurement of used equipment. Infrastructure improvement initiatives, such as commercial building renovations, railway stations, airports, runway repairs, and roadway and bridge extensions across Europe and Asia Pacific, are driving the demand for used construction equipment. A notable example is India's Pinnapuram Integrated Renewable Energy Project, a 5,230MW hybrid renewable energy initiative covering 1,929 hectares, which is set to be completed by Q4 2025. Such large-scale global developments are anticipated to further increase the demand for used construction equipment.

Additionally, the rising cost of new construction machinery, driven by technological advancements and inflation, continues to be a key market driver. As prices surge, construction firms, including those involved in smart city projects, are increasingly turning to used equipment to optimize expenditures and ensure cost-efficient project execution. With these factors in play, the global used construction equipment market is well-positioned for sustained expansion over the coming years.

Chart 11: Used Construction Equipment Market size



Source: CareEdge Research

3.2 Type of Equipment

Earth moving Equipment

- Earthmoving is heavy-duty vehicles, designed for construction activity which incorporate earthworks such as dig foundations for landscaping, moving large amounts of earth and other such activities.
- Generally, these equipment is considered to be an important resource for quarrying and demolishing activities, which are expected to grow with the industrial development.
- The earthmoving market consists of sales of machinery such as bulldozers, backhoe loaders, motor graders, trenchers.

Material Equipment

- Material handling is mechanical equipment used for storage, controlling, and managing of materials and goods.
- Transportation equipment, positioning equipment, cargo shaping equipment, and storage equipment are the four primary categories of handling equipment available.
- The material handling market consists of sales machinery such as jib crane, pallet jack, vertical carousel and more.

Building & Road Construction Equipment

- Building equipment is mechanical equipment used in residential, nonresidential building. Road construction equipment is self-propelled or towed equipment which is directly used in road construction.
- The building & road construction market consists of sales of machinery such as road roller machine, asphalt mixing plant, forklift truck, crawler excavator, truck crane.

3.3 Drivers and Challenges

Drivers	Challenges
Rising Infrastructure Development and Construction Activities: The global infrastructure boom, particularly in emerging economies, is driving demand for used construction equipment. Population growth, government projects, and urbanisation fuel the need for loaders, cranes, and excavators. Used equipment offers a cost-effective solution while supporting sustainable construction practices.	**Environmental and Regulatory Compliance**: Stricter environmental policies and emissions regulations, especially in the EU and North America limit the market for used equipment. Older machinery often fails to meet updated standards, leading to restrictions, retrofitting costs, and reduced market access.
Cost-Effectiveness and Financial Flexibility: Used construction equipment provides a more affordable	**Technological Advancements in New Equipment**: Innovations in automation, fuel efficiency, telematics,

Drivers	Challenges
alternative to new machinery, making it accessible for smaller businesses and those with budget constraints. This financial flexibility allows companies to allocate resources efficiently and remain competitive.	and emissions reduction make newer machinery more attractive. Buyers hesitate to invest in older models that lack advanced features, reducing the appeal of used equipment.
Increasing Equipment Rental and Leasing Trends: The growing rental and leasing sector boosts demand for used machinery. Rental companies prefer second-hand equipment to reduce procurement costs and increase profitability, particularly in North America and Europe.	**Equipment Reliability and Maintenance Concerns**: Used machinery varies in condition, raising concerns about breakdowns, maintenance costs, and operational downtime. The uncertainty surrounding the lifespan of older equipment poses risks, particularly for long-term, high-intensity projects.
Expanding Digital Marketplaces and E-Commerce Platforms: Online platforms facilitate seamless transactions, offering a wide range of used equipment with transparent pricing. The rise of e-commerce increases accessibility and demand, especially in North America and the Asia-Pacific region.	

3.4 Business Model for Used, Refurbished, New, and Customized Construction Equipment

Business Model for Used & Refurbished Construction Equipment

- **Procurement & Sourcing of Used Machines**

The procurement and sourcing of used construction machinery occur through multiple channels, ensuring a steady supply of quality pre-owned equipment for resale. Contractors and construction companies often sell off machinery upon project completion, while rental companies regularly upgrade their fleets, leading to the liquidation of older models. Additionally, equipment dealers and auction houses play a crucial role in the resale market, offering a diverse range of machines. OEM buyback programs further streamline the process, as manufacturers facilitate the resale of older models, ensuring proper refurbishment and market readiness. Developed countries like the USA, Canada, the UK, the Netherlands, and Australia have well-structured secondary markets, where large equipment dealerships operate similarly to automobile showrooms, providing a professional and organized platform for buying and selling used construction machinery.

- **Refurbishment & Value-Enhancement Process**

Once acquired, used construction equipment undergoes a structured refurbishment process aimed at restoring performance, extending operational life cycles, and enhancing resale value. Refurbishment can be carried out through in-house facilities, where companies utilize dedicated workshops and skilled labour to overhaul machines, or through contract refurbishment, where third-party service providers or specialized workshops perform necessary enhancements. Key value-added refurbishments typically include engine and hydraulic system repairs to improve efficiency, structural reinforcement and repainting to enhance durability and aesthetics, and replacement of high-wear components to restore full functionality. Additionally, many machines undergo electronic and control system upgrades, along with operator cabin enhancements, ensuring improved usability, compliance with safety standards, and increased market competitiveness.

- **Market Demand & Distribution Strategy**

The demand for refurbished construction equipment remains strong, driven by its significant cost advantages over new machinery. This demand is particularly high in emerging markets, where budget-conscious contractors seek reliable yet affordable alternatives to new equipment. Additionally, sectors such as mining, infrastructure, and real estate prioritize cost-effective machinery solutions to optimize capital expenditures while maintaining operational efficiency.

To meet this demand, refurbished equipment is distributed through multiple channels. Direct international sales and exports cater to contractors, sub-contractors, and fleet owners, ensuring direct access to high-quality pre-owned machinery. Local dealerships and distributors specializing in used equipment facilitate regional availability and after-sales support, enhancing market penetration. Furthermore, online marketplaces and auction platforms provide a global reach, enabling seamless transactions and expanding buyer access to a diverse inventory of pre-owned construction equipment.

Business Model for New and Customized Construction Equipment

- **Sourcing and Procurement of New Machines**

The procurement of new construction machinery is primarily facilitated through OEMs, which either sell equipment directly or through a network of authorized distributors. Additionally, dealers and intermediary suppliers play a crucial role in bridging the gap between manufacturers and buyers, ensuring market accessibility and streamlined distribution. In some cases, secondary market sales also contribute to new equipment procurement, where bulk orders are strategically resold based on regional demand and project requirements.

Purchasing decisions for new machinery are influenced by multiple factors, including infrastructure development trends in specific markets, which dictate the demand for specialized construction equipment. To optimize procurement costs, reducing reliance on multiple international distributors can be a strategic advantage. By sourcing machinery as close to production facilities as possible, end users can minimize intermediary mark-ups and logistical expenses, leading to more cost-effective acquisitions. Furthermore, currency fluctuations and import-export regulations affect overall procurement costs and the feasibility of cross-border transactions.

- **Customization and Accessorizing of New Equipment**

The demand for customized construction equipment is rising as buyers seek configurations tailored to their specific operational needs. Customization is typically carried out through in-house modification facilities, where manufacturers or dealers make necessary adjustments before delivery, or via contract customization, where third-party workshops specialize in enhancing machines based on customer requirements.

Common customization features include the installation of air-conditioning systems to improve operator comfort in extreme climates, breaker piping kits for hydraulic attachments used in mining and demolition, and multi-purpose bucket attachments to enhance machine versatility across different applications. Additionally, quick couplers allow for faster attachment changes, increasing equipment efficiency, while fire suppression systems, safety railings, and telematics improve safety and monitoring capabilities.

- **Sales and Distribution Strategy**

The distribution of new construction equipment is structured through multiple sales channels to maximize market reach and efficiency. Direct OEM and dealer networks primarily cater to large corporate contractors, ensuring access to the latest models with manufacturer-backed support. Additionally, independent distributors and resellers specialize in niche markets, supplying equipment tailored to specific industry needs. Government and institutional contracts represent

another key segment, where large-scale procurement is facilitated through tenders and public-sector initiatives. Furthermore, leasing and rental companies play a crucial role in providing flexible financing options, allowing contractors to access new machinery without significant upfront investments.

Benefit of Contract Manufacturing compared to in-house factory set up

Contract manufacturing offers several advantages depending on cost structures, market access, and industry requirements. In some countries, particularly in Southeast Asia and China, lower labour costs, better supply chain integration, and government incentives can make production more cost-effective. Additionally, nations like Germany, Japan, and South Korea provide access to advanced manufacturing technologies, precision engineering, and automation that may not be as widely available in India. Manufacturing closer to key consumer markets, such as in Mexico for the U.S. or Eastern Europe for the EU, reduces logistics costs, lead times, and import duties, making products more competitive. Furthermore, certain countries benefit from favourable trade agreements and lower tariffs, enabling smoother market entry. Well-established supplier ecosystems, particularly in China and Taiwan, ensure streamlined access to raw materials and specialized components, enhancing production efficiency. In some cases, business-friendly regulatory environments abroad reduce compliance burdens associated with labour laws and taxation, making operations smoother.

4 Global Backhoe Loader Market

4.1 Market Size of Global Backhoe Loader Market

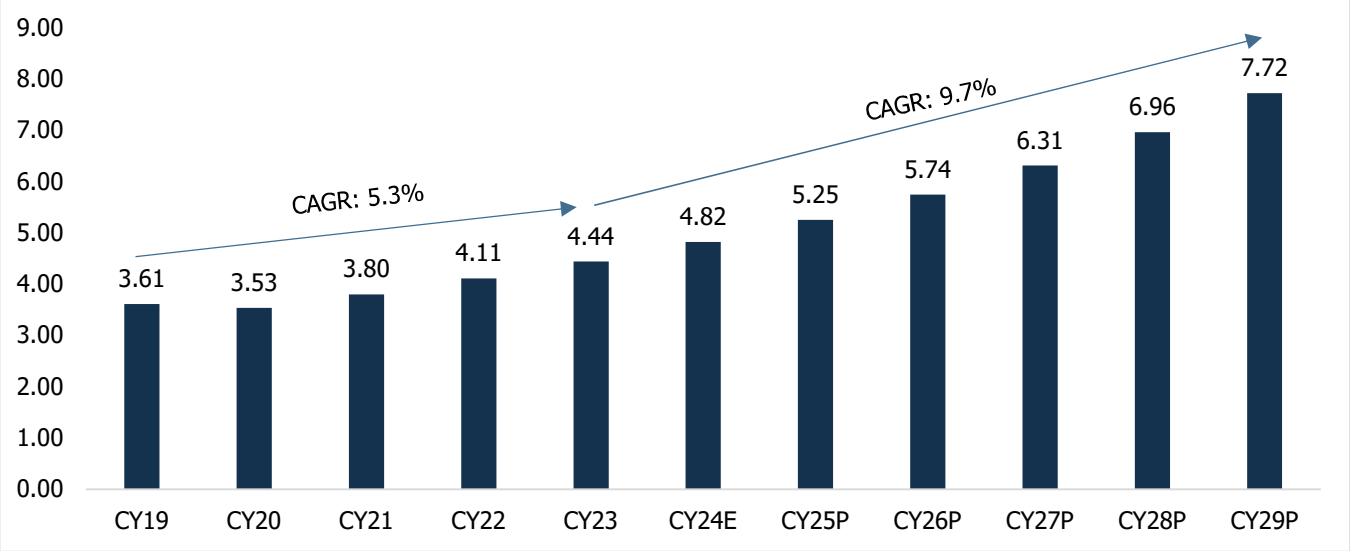
Backhoe loaders are versatile machines that combine the functions of a wheel loader and an excavator. These machines are widely used across various industries, including construction, agriculture, and mining. They are compact and can work efficiently in tight spaces. They are equipped with a front bucket that can lift and move heavy materials and a rear digging arm that can excavate and dig soil. The bucket and the arm can be easily interchanged, which makes these machines suitable for a wide range of activities.

The global backhoe loader market has demonstrated steady growth over the past several years, with the market size increasing from approximately USD 3.61 billion in CY19 to an estimated USD 4.44 billion in CY23, reflecting a CAGR of 5.3% during this period. This growth is primarily driven by increase in road construction projects and the rapid rise in power infrastructure development, especially in developing nations. Additionally, the high versatility of backhoe loaders in construction operations, coupled with their compact size, allows them to be efficiently used even in small spaces. Furthermore, drastic population expansion and the rise in gross household disposable income in both developing and developed nations are contributing to the market's growth.

Looking ahead, the market is expected to continue its upward trajectory with a projected CAGR of 9.7% from 2023 to 2029, potentially reaching USD 7.72 billion by the end of the forecast period. The steady rise in demand can be attributed to the versatility and efficiency of backhoe loaders in various applications, including construction, agriculture, and municipal tasks. The construction industry is the largest user of backhoe loaders. These machines are used for activities such as digging trenches, excavating foundations, and transporting materials. Backhoe loaders are also used in road construction activities, such as grading roads, clearing debris, and levelling terrain. Similarly, in the agriculture industry also, backhoe loaders are extensively used for tasks such as digging ditches for irrigation systems, building silos, and grading field surfaces. Backhoe loaders are also useful for transporting crops and livestock around a farm. Moreover, in the mining industry, backhoe loaders are used for underground mining activities. These machines can easily manoeuvre through tight spaces and can quickly dig through various layers of soil and rocks. Backhoe loaders are also used for carrying heavy loads of minerals and ores to designated areas. Popular backhoe loaders like the Caterpillar 420F2, JCB 3CX, and Case 580N are further enhancing the market's appeal due to their powerful engines, versatile designs, and

user-friendly features. The increasing trend of renting construction equipment further supports market expansion by making backhoes more accessible to small and mid-sized contractors. These factors will drive the growth of the global backhoe loaders market during the forecast period.

Chart 12: Market Size of Global Backhoe Loader Market (In USD Billion)



Source: Technavio, EMIS

4.2 Market Size by Region

4.2.1 North America

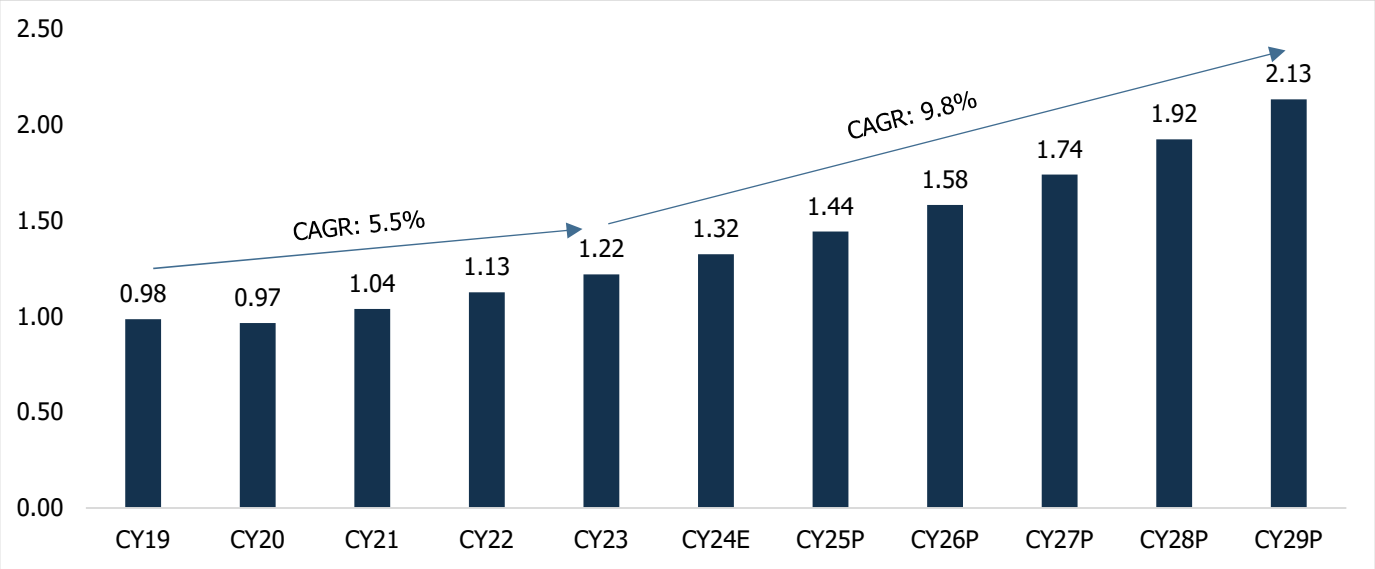
The North America backhoe loader market has experienced consistent growth from CY19 to CY23, with the market size increasing from USD 0.98 billion in CY19 to USD 1.22 billion in CY23, reflecting a CAGR of 5.5% during this period. This growth can be attributed to several factors, including the region's robust construction sector, which is a major driver of demand for backhoe loaders. There has been rapid development of several large-scale construction projects and increased focus on government authorities on infrastructure development mainly in developed countries like US and Canada which is driving the growth in the region. Additionally, there have been significant technological advancements in backhoe loaders in the recent years such as the integration of GPS and telematics systems, that encourage companies to invest higher in these machines to boost up their productivity and maximize their revenues, which in turn, driving the market growth in the region.

Looking ahead, the North America backhoe loader market is projected to continue its expansion, reaching an estimated market size of USD 2.13 billion by CY29, growing at a robust CAGR of 9.8%. This future growth will be driven primarily by increasing investments in infrastructure development, particularly in the U.S., where the federal government is prioritizing the construction of roads, tunnels, and bridges. Additionally, the rising popularity of single-family home development projects is expected to further propel market expansion. The modernization and upgrading of transport infrastructure, especially in key states such as California, Texas, Florida, and New York, will also contribute significantly to market growth in the coming years.

Moreover, technological advancements will play a crucial role in shaping the North America backhoe loader market. For instance, in September 2024, Bobcat introduced the B760 backhoe loader in the region, which offers the highest digging depth in its size category and is highly versatile in its operations. Such frequent innovations by industry players are expected to enhance the capabilities of backhoe loaders, making them more efficient and adaptable to various

applications. As a result, the steady introduction of advanced models, combined with strong infrastructure investments, is anticipated to drive sustained growth in the North America backhoe loader market throughout the forecast period.

Chart 13: Market Size of North America Backhoe Loader market (In USD Billion)



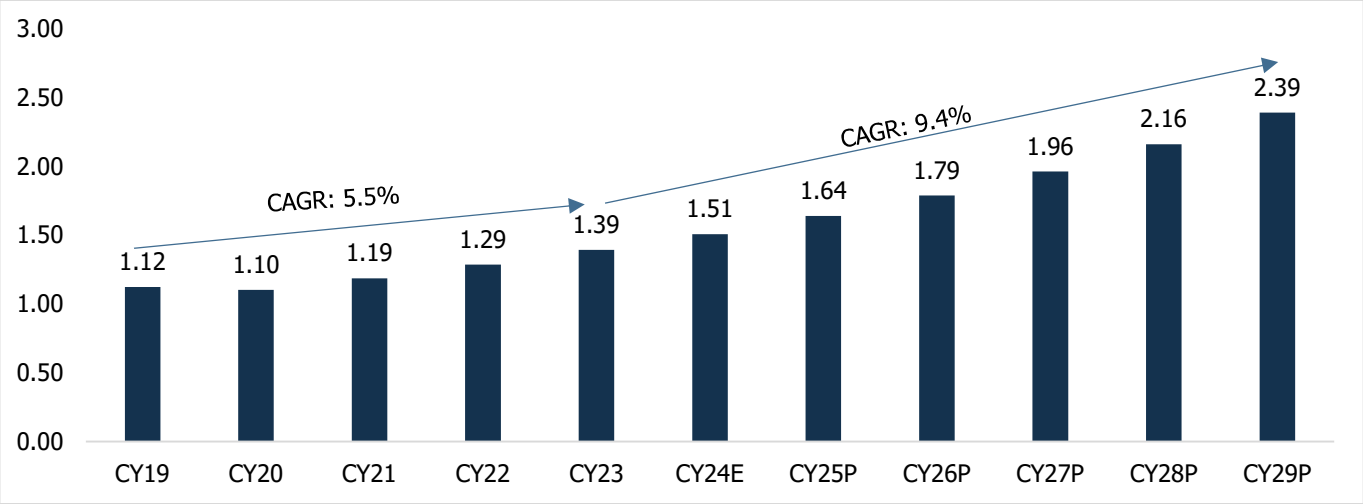
Source: Technavio, EMIS

4.2.2 APAC

The Asia-Pacific region stands out as a key growth hub for the backhoe market, with market size increasing from USD 1.12 billion in CY19 to USD 1.39 billion in CY23, reflecting a CAGR of 5.5% during this period. This growth has been primarily driven by rising urbanization, robust infrastructural advancements, and a surge in construction activities. Economies such as India and China are frontrunners in market growth, driven by growing demand for backhoes across sectors such as construction, agriculture, and mining. Further, backhoe sales in the region are fuelled by extensive infrastructure initiatives, spanning from road and rail projects to urban development programs. Both multinational and local enterprises are strategically establishing production units in the region, capitalizing on cost-effective labour and the escalating market demand, thus driving the business growth.

The APAC backhoe loader market is projected to experience significant growth, reaching an estimated USD 2.39 billion by CY29, with a strong CAGR of 9.4%. This growth will be largely driven by the surge in construction activities in emerging economies, fuelled by increased government spending on infrastructure development. The growing need for new residential and commercial buildings to support the rising urban population will further boost the use of backhoe loaders throughout the region. Major infrastructure initiatives in APAC highlight the substantial investments being made in construction and development. For instance, Australia's M6 Motorway Expansion project, estimated at around USD 3.1 billion, aims to extend a 23-kilometre motorway in Southern Sydney, with completion expected by late 2025. Likewise, Malaysia's Sarawak-Sabah Link Road project, valued at approximately USD 1.7 billion, is set to build a 425-kilometre road to replace outdated timber roads and connect 14 towns, with an anticipated completion date of late 2026. These extensive infrastructure projects will drive the demand for backhoe loaders, which are essential for excavation, material handling, and site preparation. In addition, advancements in technology, such as fuel-efficient and electric-powered models, are likely to further propel market growth. With robust economic development, rising infrastructure investments, and increased mechanisation in construction, the APAC backhoe loader market is well-positioned for substantial growth in the coming years.

Chart 14: Market Size of APAC Backhoe Loader market (In USD Billion)



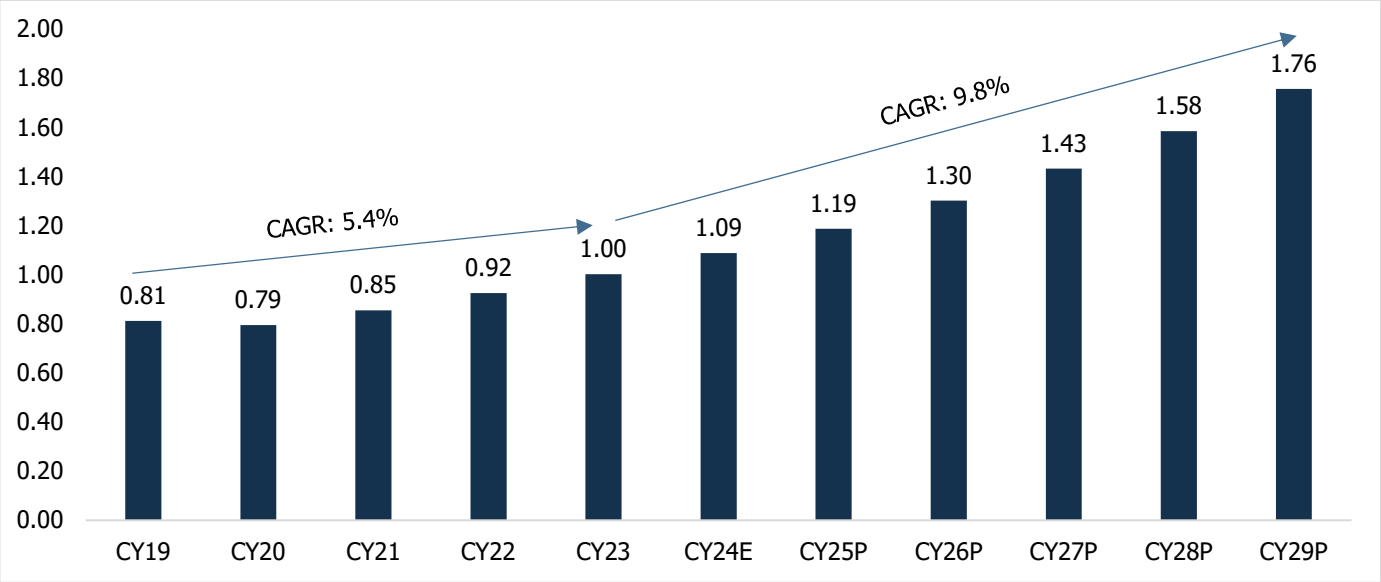
Source: Technavio, EMIS

4.2.3 Europe

The Europe backhoe loader market has experienced steady growth from 2019 to 2023, increasing from USD 0.81 billion in 2019 to USD 1.00 billion in 2023, reflecting a CAGR of 5.4% during this period. This growth has been primarily driven by rising emphasis on urban development and redevelopment projects. Several European governments are investing aggressively in enhancing the city infrastructure and rolling out public amenities, focusing on expanding transportation networks and developing new residential areas. Continued urbanization and the subsequent infrastructure development have increased the demand for loaders, owing to their versatility to undertake various tasks such as earthmoving, loading & unloading, and pallet handling. Additionally, several notable companies such as Caterpillar, Komatsu, and Mitsubishi Heavy Industries have a powerful base in this region, ensuring constant developments in the market.

Looking ahead, the Europe backhoe loader market is expected to grow at a robust CAGR of 9.8%, reaching an estimated USD 1.76 billion by 2029. This growth will be fuelled by increasing investments in infrastructure projects across the region, particularly in transportation, energy, and residential construction. Countries such as Germany, the UK, France, and Italy are seeing a rise in smart city initiatives and sustainable construction practices, which will further drive the demand for technologically advanced backhoe loaders. Moreover, manufacturers are focusing on accelerating the launch of electric loaders to adhere to the European Commission's emission reduction targets, aimed at lowering the carbon footprint from this sector to 35% by 2030 in the region. Additionally, large-scale infrastructure projects such as the HS2 rail project in the UK, aimed at improving connectivity and reducing travel times between major cities, are expected to drive steady demand for construction equipment. With the increasing need for efficient, multipurpose machinery in infrastructure and utility projects, the Europe backhoe loader market is poised for significant expansion over the forecast period.

Chart 15: Market Size of Europe Backhoe Loader market (In USD Billion)



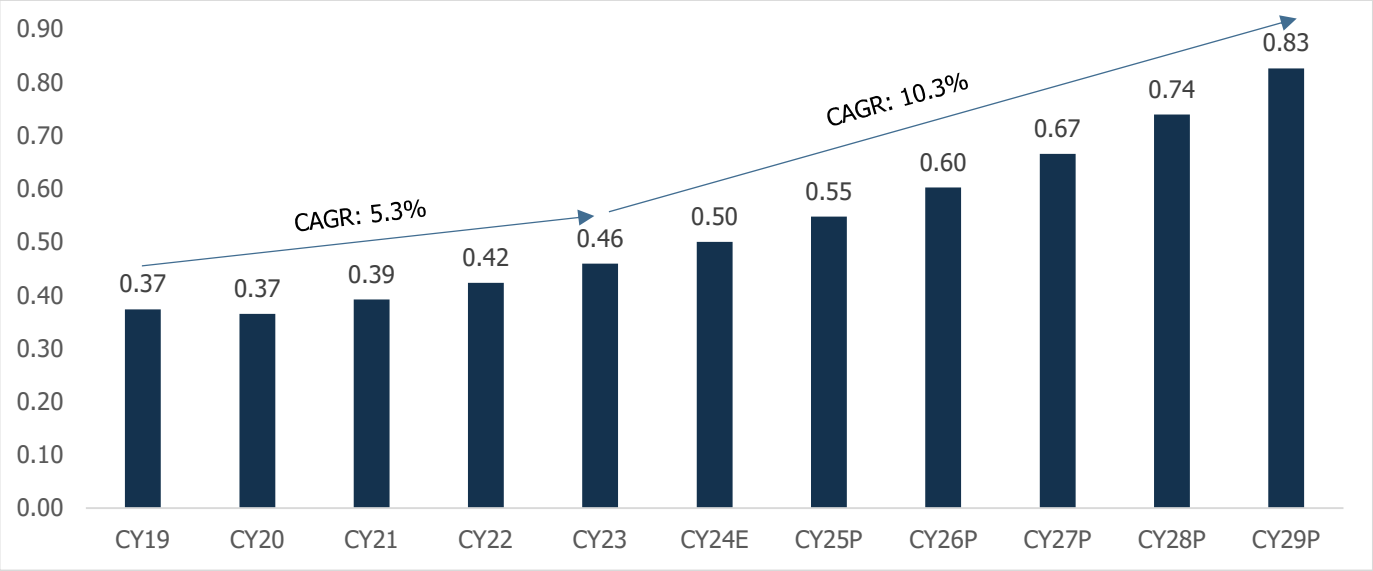
Source: Technavio, EMIS

4.2.4 South America

The South America backhoe loader market has demonstrated steady growth from CY19 to CY23, increasing from USD 0.37 billion in CY19 to USD 0.46 billion in CY23, reflecting a CAGR of 5.3% during this period. This growth has been primarily driven by increasing investments in infrastructure development, particularly in road construction, urban expansion, and utility projects. Governments across the region, especially in Brazil, Argentina, and Chile, have focused on improving transportation networks, which has fuelled the demand for construction equipment, including backhoe loaders. Additionally, the agricultural sector in South America, which plays a significant role in the region's economy, has also contributed to market growth, as backhoe loaders are widely used for land preparation, irrigation, and material handling in farming operations.

The South America backhoe loader market is projected to experience a robust growth rate of 10.3% CAGR, potentially reaching around USD 0.83 billion by CY29. This anticipated growth is fuelled by the rise of large-scale infrastructure initiatives, increased government investment in public works, and a surge in urbanization. Countries like Brazil and Colombia are seeing substantial funding directed towards road networks, housing developments, and mining activities, which are all likely to drive up the demand for backhoe loaders. Additionally, major projects such as Brazil's BR-163 Highway Expansion and Colombia's 4G Road Infrastructure Program underscore the growing requirement for construction equipment in the area. With the ongoing investments in infrastructure, the expansion of urban areas, and advancements in construction technology, the South America backhoe loader market is set for considerable growth in the coming years.

Chart 16: Market Size of South America Backhoe Loader market (In USD Billion)



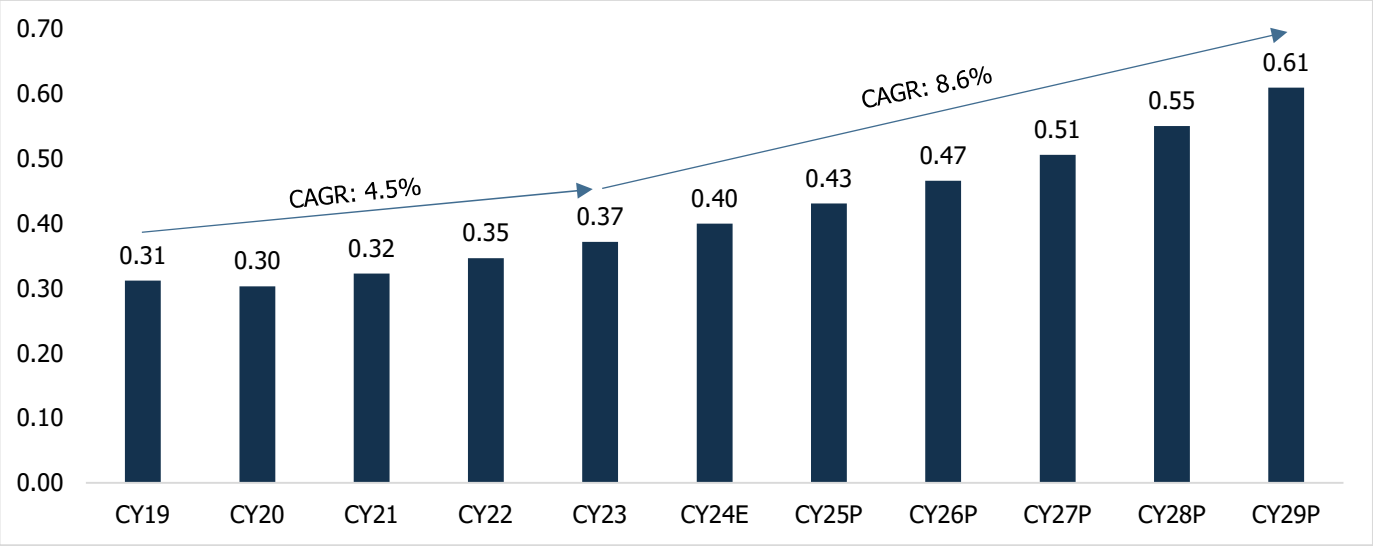
Source: Technavio, EMIS

4.2.5 Middle East and Africa

The Middle East and Africa (MEA) backhoe loader market has exhibited steady growth from CY19 to CY23, increasing from USD 0.31 billion in CY19 to USD 0.37 billion in CY23, reflecting a CAGR of 4.5% during this period. This growth has been primarily driven by rising infrastructure development across the region, particularly in the construction and oil & gas sectors. Government initiatives aimed at expanding road networks, urban housing, and utility projects have fuelled demand for construction equipment, including backhoe loaders. Additionally, major economies such as Saudi Arabia, the UAE, and South Africa have been investing heavily in mega infrastructure projects, including smart cities and renewable energy developments. The mining sector in Africa has also contributed to market expansion, as backhoe loaders are widely used for material handling and excavation in mineral-rich regions.

Looking ahead, the MEA backhoe loader market is projected to grow at a CAGR of 8.6%, reaching an estimated USD 0.61 billion by CY29. This future growth will be driven by increasing urbanization, rising government expenditure on infrastructure projects, and growing demand for cost-effective and versatile construction machinery. In the Middle East, large-scale projects such as Saudi Arabia's NEOM City and the UAE's Etihad Rail Network are expected to significantly boost demand for backhoe loaders. Meanwhile, in Africa, ongoing investments in road construction, energy infrastructure, and mining projects, such as South Africa's Limpopo Coal-Fired Power Plant, will further propel market expansion. With strong infrastructure development plans, increased foreign direct investment (FDI), and the adoption of technologically advanced construction equipment, the MEA backhoe loader market is poised for significant growth over the forecast period.

Chart 17: Market Size of Middle East and Africa Backhoe Loader market (In USD Billion)



Source: Technavio, EMIS

4.3 Drivers and Challenges

Drivers	Challenges
Growing Infrastructure Development Activities Worldwide: Significant Infrastructure Development Activities Worldwide Substantial investments in infrastructure development in both developed and emerging economies are greatly increasing the demand for backhoe loaders. Governments and private entities are committing considerable resources to large-scale infrastructure initiatives, such as road construction, smart city projects, transportation networks, and urban housing developments. For example, India's Bharatmala Pariyojana aims to improve road connectivity throughout the country, China's Belt and Road Initiative (BRI) focuses on expanding global infrastructure, and the U.S. Bipartisan Infrastructure Law supports the modernization of roads, bridges, and public transit systems, creating significant opportunities for construction equipment manufacturers. The growing focus on urbanization, along with the need for efficient and adaptable earthmoving equipment, is anticipated to further boost the backhoe loader market in the coming years.	**High Initial Investment:** One of the key challenges hindering the growth of the global backhoe loader market is the substantial initial investment needed to buy and maintain these machines. The upfront costs associated with backhoe loaders can pose a significant financial strain on small and medium-sized construction firms, especially in emerging markets. Beyond the purchase price, ongoing costs such as fuel, regular maintenance, and spare parts further elevate the total cost of ownership. These high financial demands often push businesses to consider rental and leasing options as a more feasible alternative, which, while providing flexibility, can restrict the overall sales growth of new backhoe loaders in the market.
Increasing Investments in Mining Projects in MEA and Latin America: The Middle East & Africa (MEA) and Latin America are seeing a notable increase in mining activities, driven by the growing global demand for minerals and metals. Countries like South Africa, Chile, Brazil, and Peru are investing heavily in new and expanding mining projects, which is boosting the need for	**Limited Availability of Qualified and Skilled Equipment Operators:** The limited number of qualified and skilled equipment operators poses a major challenge to the growth of the global backhoe loader market. Operating backhoe loaders efficiently demands specialized training and practical experience. Unfortunately, the industry is experiencing a shortage of trained personnel,

Drivers	Challenges
construction equipment, particularly backhoe loaders, for tasks such as excavation, material handling, and ore transportation. Significant projects, including South Africa's Limpopo Coal-Fired Power Plant and Brazil's Carajás Iron Ore Expansion, are anticipated to maintain a strong demand for backhoe loaders, as these machines provide versatility, efficiency, and cost-effectiveness for mining operations. Furthermore, government initiatives aimed at developing the mining sector, along with rising foreign direct investments (FDI), are further propelling the use of backhoe loaders in these areas, contributing to the overall growth of the market.	especially in developing areas where vocational training programs for heavy machinery operation are not as common. This lack of skilled operators impacts operational efficiency and productivity, while also raising the risk of machine misuse, equipment damage, and workplace accidents, which in turn leads to increased operational costs and project delays.
Rising Adoption of Rental Construction Equipment: The growing trend of renting construction equipment is becoming a significant factor in the expansion of the global backhoe loader market. Many construction firms, especially small and medium-sized contractors, are opting for rental solutions to lower capital expenses and cut down on maintenance costs. This shift is prompting rental companies to enhance their fleets with advanced, fuel-efficient, and low-maintenance backhoe loaders to satisfy the increasing demand. The use of rental equipment is particularly prevalent in North America, Europe, and APAC, where the rates of rental adoption are rising due to the affordability and flexibility that leasing options provide.	**Stringent Environmental Regulations:** The global focus on combating climate change and promoting cleaner, greener practices has led environmental organizations around the world to implement stricter emission regulations. Regulatory bodies have established stringent emission standards for factories, vehicles, production facilities, waste management, machinery, and equipment. For example, the European Environment Agency (EEA) has introduced Stage V exhaust emission regulations, which limit particulate matter (PM) emissions to 0.015 g/kWh and nitrogen oxide (NOx) emissions to 0.4 g/kWh. Additionally, these regulations mandate the installation of diesel particulate filters (DPFs) in equipment to minimize soot emissions. As a result, equipment manufacturers are facing increased costs. Consequently, wheel loader manufacturers are required to invest significantly in incorporating these advanced technologies into their products to meet the stringent emission standards.

5 Engineering Goods Sector

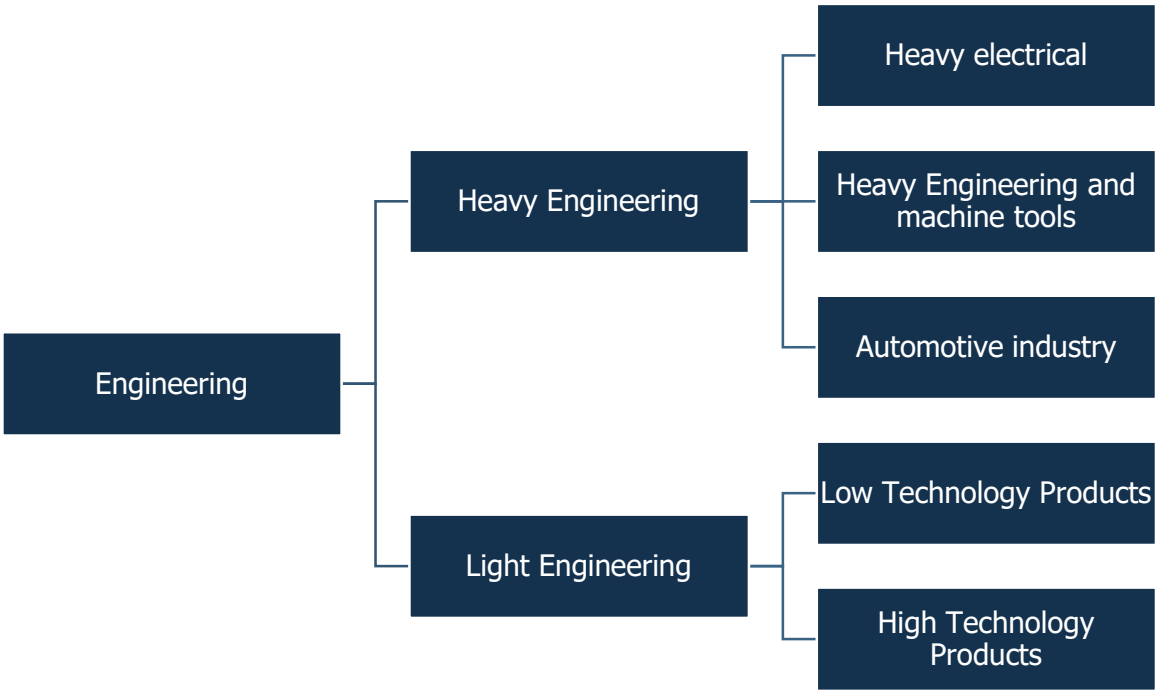
5.1 Overview

The engineering industry is often seen as the foundation of all industrial sectors, playing a pivotal role in supporting both large-scale and small-scale industries. It is generally divided into two main categories: heavy engineering and light engineering. This sector includes various sub-sectors such as iron and steel, base metals, mechanical and electrical machinery, transport equipment (like automobiles), instruments and appliances, time-measuring devices, musical instruments, arms and ammunition, and furniture-related products.

As the largest industrial sector in India, the engineering industry serves as the backbone of the economy, facilitating capacity creation across various critical sectors such as infrastructure, power, mining, oil and gas, refineries, steel, automotive, and consumer durables. India holds a comparative advantage in several engineering sub-sectors due to cost-effective manufacturing, deep market knowledge, technological expertise, and continuous innovation. Furthermore, the sector has strong interconnections with other industries, supplying essential capital equipment and technological solutions that drive economic growth.

The engineering sector contributes around 3.5% of India's Gross Domestic Product (GDP) and is closely linked with the broader manufacturing and infrastructure landscape. Its expansion has a direct and significant impact on the growth of core industries, making it a critical driver of economic progress. The sector is well-organized, with large companies leading the way, while employing over 4 million skilled and semi-skilled workers throughout the country.

As mentioned above, Engineering sector can broadly be categorized into following two parts -



The **heavy engineering** involves the production of large, complex products and facilities, including heavy equipment, large machine tools, and industrial structures. This segment encompasses industries such as heavy electrical, heavy engineering, machine tools, and automotive, with key sub-sectors including textile machinery, cement machinery, sugar machinery, rubber machinery, material handling equipment, oil field equipment, metallurgical equipment, mining

machinery, dairy machinery, and machine tools. These industries typically involve intricate manufacturing processes and are capital-intensive, requiring significant infrastructure and technological capabilities.

On the other hand, the **light engineering** generally does not require direct use of raw materials but focuses on assembling existing pre-fabricated products, such as computer chips and industrial instruments. The light engineering segment in India includes industries like the rolling bearing industry, medical and surgical instruments, process control instruments, industrial fasteners, ferrous castings, steel forgings, seamless steel pipes and tubes, electrical resistance welded (ERW) steel pipes, submerged-arc welded (SAW) pipes, and the bicycle industry. This segment is more focused on precision, smaller-scale production, and innovation, contributing significantly to India's manufacturing landscape.

5.2 Trade Dynamics

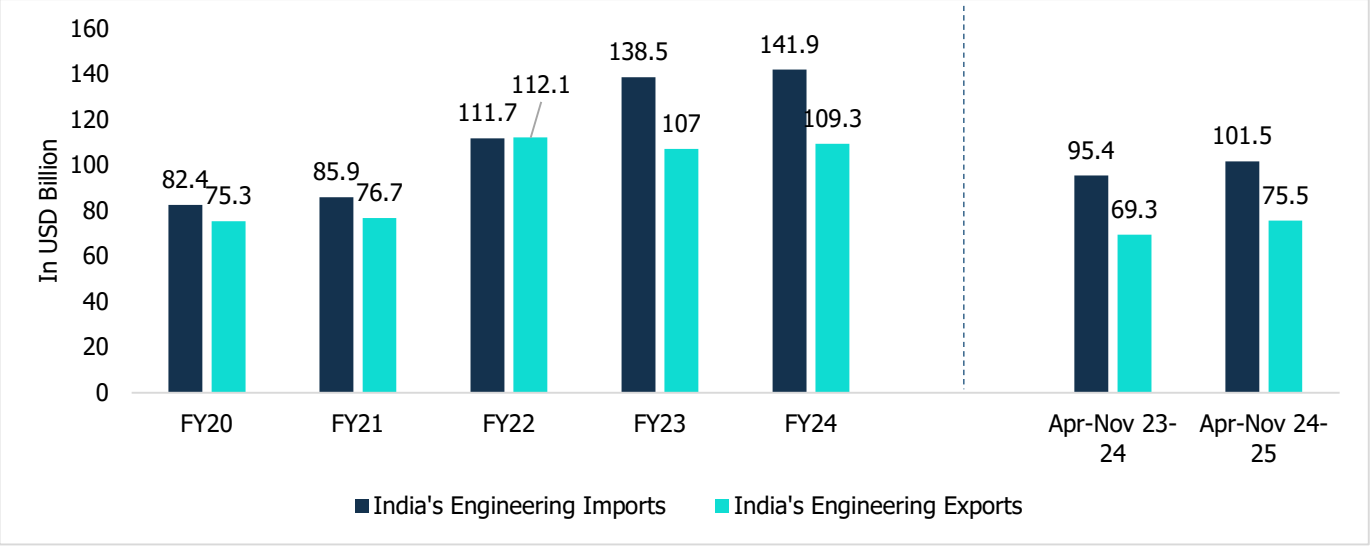
Imports

India's engineering imports have consistently increased over the years, reflecting rising domestic demand for capital goods, high-tech machinery, and critical components. In FY24, engineering imports reached USD 141.9 billion, registering a 2.4% y-o-y growth from USD 138.5 billion in FY23. Over the past five years, imports have grown at a CAGR of 14.6%, indicating increasing reliance on foreign-sourced engineering products.

The trend of India being a net importer of engineering goods is evident, with imports exceeding exports in most years. While exports surpassed imports in FY22 (USD 112.1 billion vs. USD 111.7 billion), India reverted to being a net importer from FY23 onwards, as imports outpaced exports by a significant margin (USD 141.9 billion in imports vs. USD 109.3 billion in exports in FY24).

For the April-November period of FY25, imports stood at USD 101.5 billion, reflecting an increase of 6.5% y-o-y compared to USD 95.4 billion in the same period of FY24. All the engineering panels barring Iron & Steel and Transport equipment witnessed an increase in import in this period. This indicates sustained demand for high-value capital equipment, electronics, and industrial machinery, particularly for sectors like automobile manufacturing, power, and renewable energy.

Chart 18: Indian Engineering Goods Import-Export



Source: Export Promotion Council of India (EEPC India)

Exports

Broad Categories of Engineering Goods exported from India

As per Engineering Export Promotion Council (EEPC) of India, the various product categories that covered under exports of engineering goods include:

Table 6: Various Categories of Products Exported

Products	Sub-categories
Pumps	Positive Displacement pumps, Reciprocating pumps, Rotary Pumps, Dynamic pumps and Special pumps
Valves	Multiturn Valves, Quarter Turn Valves and Check Valves
Medical Devices	Consumables, Implants, Diagnostic and Imaging Instruments, Instrument and Appliance and Patient Aids and others
Electrical Machinery and Components	Cables, Capacitors, Electrical insulating materials, Energy meters, Insulators, LV Switchgear, Power Generation system, Rotating Machinery, Smart Grid, Surge Arrestors, Winding Wires, Boilers, Turbines, Control Gears, Transmission line towers, Motors, Nuclear Reactors and its parts, Electricity Rotary Converters, Static Converters, Inductors, Automatic Circuit Breakers, Switch, Lightening Arresters, Voltage Limiters, Surge Suppressors, Fuses, Relays, Boards, Panels and Consoles.
Textile Machineries	Spinning and Allied Machines, Weaving and Allied Machines, Processing Machinery, Miscellaneous Spinning, Weaving and Processing Machines, Textile Testing/Measuring/Controlling Equipment/Systems, Pneumatic Equipment, Air Conditioning etc., Components, Parts, Accessories and Attachments of Textile Machinery
Machine Tools	Metal cutting machines, Boring-milling machines, Drilling machines, Taping and threading machines, Grinding machines, Broaching machines, Gear Cutting machines, Sawing machines, Other cutting and sawing machines, Shaping and slotting machines, Other metal cutting machines, Metal forming machines and Metal working machines, Machining centres, 7 Machine tools for wood working, Pneumatic machine tools, Machines with self-contained electric motor, Other machine tools, Parts and accessories of machine tools, Construction and earthmoving machinery and parts, Agriculture machinery and parts and, Hand tools.

Source: Export Promotion Council of India (EEPC India)

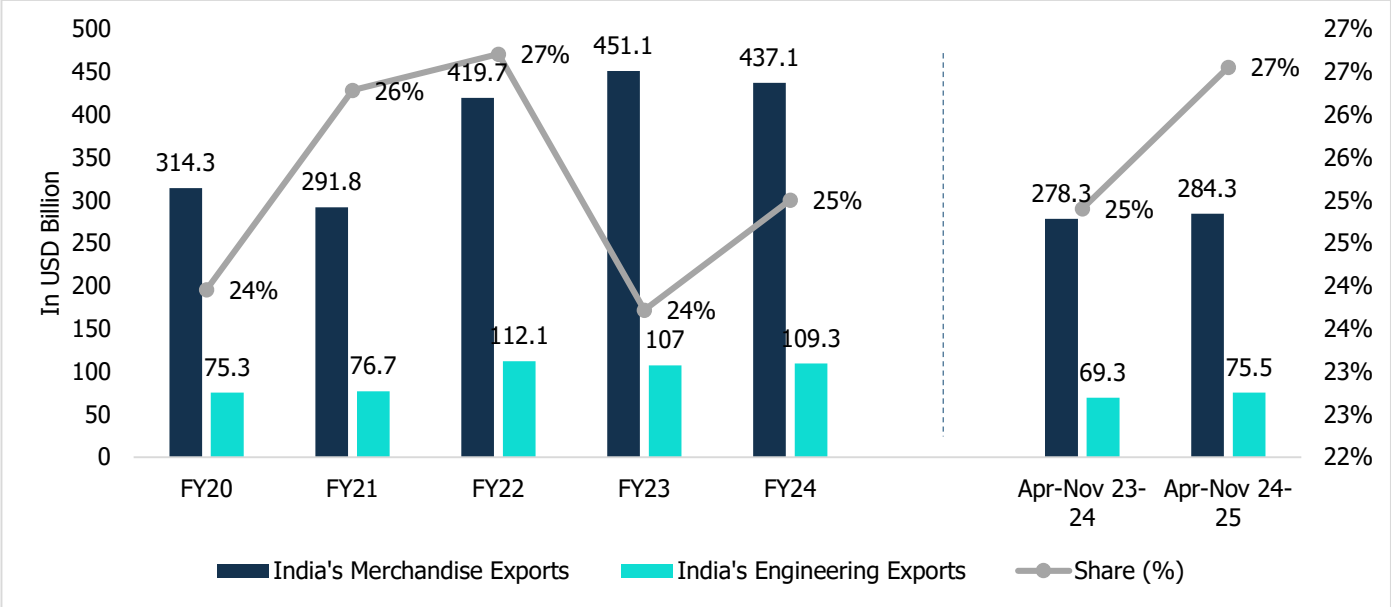
India's Engineering Export Performance

The Indian engineering sector, accounting for 3% of the total GDP, serves as a vital component of the Indian economy. It stands as the largest contributor to the nation's overall merchandise exports, representing 24-27% of total exports over the past five years. In FY24, engineering exports stood at USD 109.3 billion, reflecting a 2.1% YoY growth from USD 107 billion in FY23. This growth is notable given the 3.1% decline in total merchandise exports during the same period, indicating the sector's resilience despite global trade disruptions.

The sector saw significant expansion in FY22, with engineering exports reaching USD 112.1 billion, a 46.2% growth from USD 76.7 billion in FY21. However, in FY23, exports fell to USD 107 billion, driven by weak global trade trends, dwindling demand, forex crises, and geopolitical conflicts.

For the April-November FY25 period, engineering exports reached USD 75.5 billion, growing 9% y-o-y compared to USD 69.3 billion in the same period of FY24. This period also saw total merchandise exports rise slightly from USD 278.3 billion to USD 284.3 billion, with engineering exports maintaining a 27% share of the total export basket.

Chart 19: Overall Merchandise Export vs Overall Engineering Exports



Source: Export Promotion Council of India (EEPC India)

Product panel wise India's engineering exports

India's engineering exports have demonstrated steady growth over the years, registering a CAGR of 9.8% from FY20 to FY24. The sector peaked at USD 112.1 billion in FY22, followed by a marginal decline in FY23 due to global economic headwinds before recovering to USD 109.3 billion in FY24. This impressive growth in Engineering Goods exports in recent years has largely been due to the zero-duty Export Promotion Capital Goods (EPCG) scheme of the Ministry of Commerce & Industry which forms part of the Foreign Trade Policy (FTP) of the Government of India.

Among key segments, Iron and Steel exports witnessed a notable surge in FY22, reaching USD 31.7 billion, before moderating to USD 21.7 billion in FY24, largely due to fluctuating global steel prices and trade restrictions. Non-ferrous metals and products recorded a strong 13.5% CAGR, reflecting robust demand for aluminium and copper-based industrial products. Industrial machinery maintained steady growth, reaching USD 18.8 billion in FY24, with a 10.0% CAGR.

Electrical machinery exports grew at a CAGR of 8.4%, reaching USD 12.3 billion in FY24, driven by increasing demand for power and automation equipment. Automobile and auto component exports remained strong, registering a 9.5% CAGR, with exports reaching USD 21.6 billion in FY24. A standout performer was the aircraft and spacecraft parts segment, growing at a remarkable 22.8% CAGR, driven by increasing participation of Indian firms in global aerospace supply chains. On the other hand, shipbuilding and floating product exports declined at a -2.9% CAGR, reflecting challenges in global shipping demand and order volatility.

Table 7: Product panel wise India's engineering exports

Broad Product Categories	FY20	FY21	FY22	FY23	FY24	Apr-Nov FY25	CAGR (FY19-FY24)
Iron and Steel and Products made of Iron and Steel	16,266.7	18,681.2	31,689.2	23,166.1	21,752.3	12,659.1	7.5%
Non-Ferrous Metals & products made of Non-Ferrous Metals	7,629.6	8,974.3	15,455.2	13,509.3	12,646.8	7,664.9	13.5%
Industrial Machinery	12,868.2	12,568.3	17,263.0	18,791.0	18,849.6	12,950.4	10.0%
Electrical Machinery	8,962.8	8,125.7	10,370.6	10,962.2	12,370.7	9,349.0	8.4%
Auto and Auto Parts	15,039.4	14,089.5	20,371.6	21,749.1	21,624.3	15,360.8	9.5%
Aircrafts and Spacecraft parts and products	1,424.2	1,165.5	1,157.8	1,430.4	3,241.2	3,873.2	22.8%
Ships Boats and Floating products and parts	4,558.2	4,488.2	3,587.3	4,035.2	4,059.6	3,224.4	-2.9%
Other Engineering Products	8,595.3	8,626.9	12,207.6	13,397.9	14,774.5	10,390.3	14.5%
Total engineering exports	**75,344.4**	**76,719.6**	**1,12,102.4**	**1,07,041.2**	**1,09,319.0**	**75,472.1**	**9.8%**

Source: Export Promotion Council of India (EEPC India)

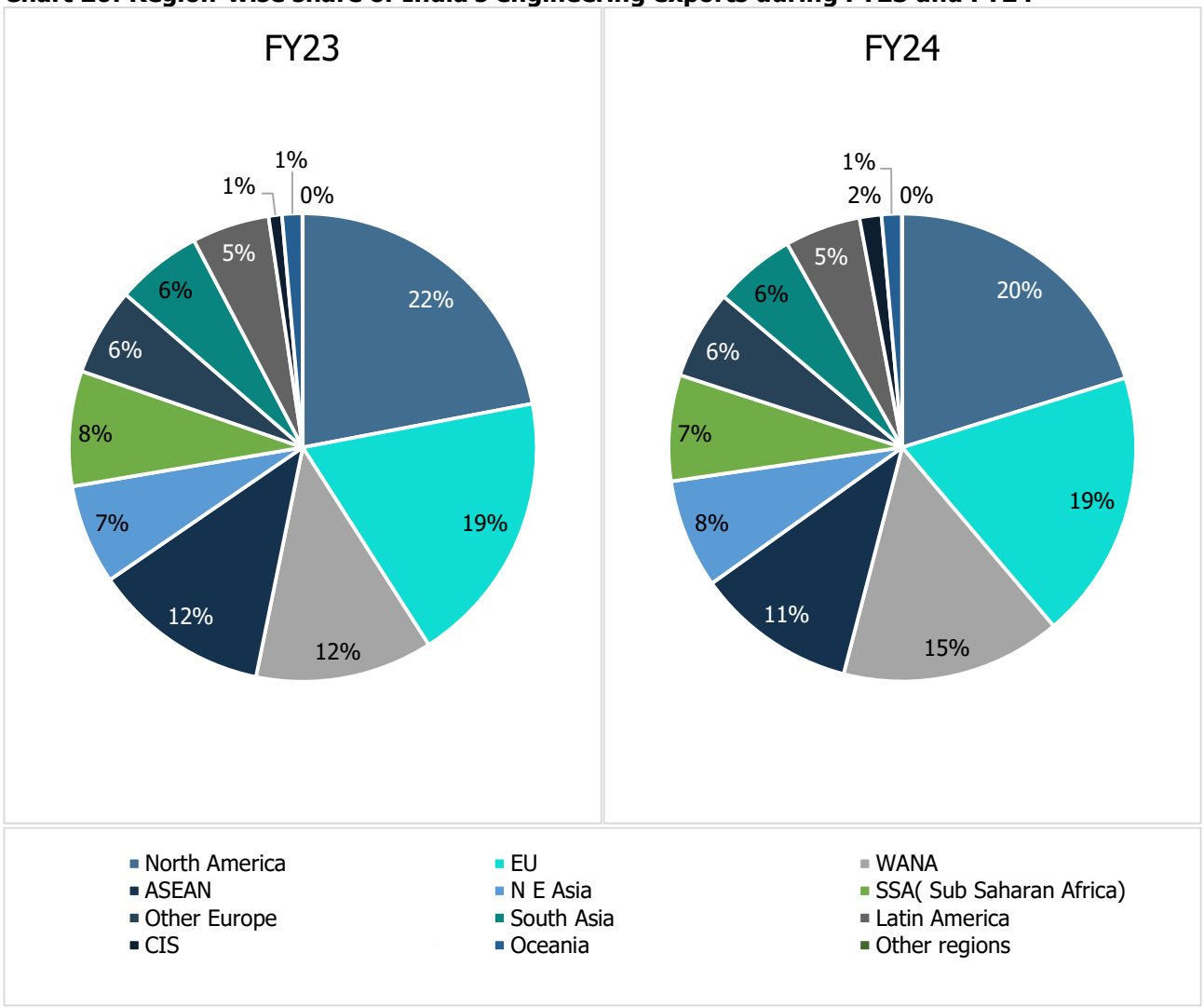
Export Destinations of Indian Engineering Products

India exports engineering products to the following regions:
North America, EU, WANA (West Asia and North Africa), ASEAN, North East Asia, SSA (Sub Saharan Africa), Other Europe, South Asia, Latin America, CIS (Commonwealth of Independent States), Oceania and Other regions.

In FY24, North America and the European Union remained the top destinations for India's engineering exports, accounting for 20% and 19% of the total engineering exports, respectively. CIS region registered the highest year-on-year growth of 67.5% compared to FY23, followed by the WANA region with a growth of 27%, North-East Asia (11.6%), Other Europe (3.9%), and Oceania (2.6%). Conversely, the ASEAN region experienced the sharpest decline, with a de-growth of 7.3% in FY24, primarily attributed to foreign exchange shortages and liquidity constraints. Other regions that witnessed negative growth include North America (-6.2%), Sub-Saharan Africa (SSA) (-6.0%), South Asia (-3.1%), and Other Regions (-1.5%).

The top 25 importing nations accounted for 75.1% of India's total engineering exports in FY24, underscoring the significant dependence on traditional markets. The United States, United Arab Emirates (UAE), Germany, Singapore, and Italy were the top five destinations for Indian engineering goods in FY23. However, in FY24, Saudi Arabia replaced Singapore among the top five importing countries. In FY24, several key markets exhibited positive growth in India's engineering exports, including Russia, UAE, Saudi Arabia, the United Kingdom, South Korea (Republic of Korea), Malaysia, Japan, and Spain. In contrast, exports to the United States, Singapore, the Netherlands, Thailand, France, Bangladesh, South Africa, and Nepal witnessed a decline.

Chart 20: Region-wise share of India's engineering exports during FY23 and FY24



Source: Export Promotion Council of India (EEPC India)

5.3 Key Drivers and Challenges

Drivers

- **Infrastructure and Industrial Expansion**

The rapid expansion of infrastructure and industrial development is a key driver for India's engineering goods sector. The National Infrastructure Pipeline (NIP), with an investment of Rs. 111 lakh crores by 2025, is fuelling demand for construction equipment, industrial machinery, and heavy engineering goods. The expansion of metro projects, smart cities, highways, and ports is increasing the need for advanced machinery, fabrication equipment, and automation technologies. Additionally, investments in renewable energy, power transmission, and distribution are boosting demand for electrical machinery, transformers, switchgear, and cables. The government initiatives such as industrial corridors, special economic zones (SEZs), and dedicated freight corridors (DFCs) are further accelerating industrial growth, increasing the consumption of precision engineering and automation technologies. As infrastructure development continues, the engineering goods industry stands to benefit from it.

- **Export Opportunities and Global demand**

India's engineering goods sector benefits from strong export opportunities and global demand, contributing 24-27% of total merchandise exports. The engineering exports stood at USD 109.3 in FY24, reflecting 2.1% Y-o-Y growth. The key markets include North America, Europe, and ASEAN, where demand for industrial machinery, electrical equipment, and auto components continues to rise. The government initiatives such as free trade agreements (FTAs), export promotion schemes, and financial incentives are supporting Indian firms in expanding their global footprint. Additionally, the sector is witnessing a shift towards high-value engineering products, including aerospace components, medical devices, and precision engineering, which enhances India's competitiveness in advanced manufacturing.

- **Growth in MSMEs and Domestic Engineering Firms**

The growth of MSMEs and domestic engineering firms is a key driver for India's engineering goods sector, strengthening local supply chains and enhancing manufacturing capabilities. The expansion of precision engineering, casting, and fabrication industries is fostering greater self-reliance in key segments. Access to affordable credit, technology upgradation programs, and government-backed initiatives such as the Credit Linked Capital Subsidy Scheme (CLCSS) and MSME Champions Scheme are enabling small and medium enterprises to scale up production and improve efficiency. Additionally, increasing collaborations between Indian and global firms through technology transfer, joint ventures, and strategic partnerships are boosting competitiveness, facilitating the adoption of advanced manufacturing techniques, and positioning Indian MSMEs as key players in the global engineering value chain.

- **Demand Drivers for key industries**

Sectors	Details	Impact on demand of Engineering goods
Power Generation Capacity	India's total power generation capacity is expected to double from 462 GW in December 2024 to around 900 GW by March 2032. Additionally, Transmission Line Network is projected to increase from 4.85 lakh cKm in 2024 to 6.48 lakh cKm by 2032 and Transformation Capacity is set to expand to 2.38 million MVA by 2032.	Increased demand for electrical machinery, transformers, cables, and switchgear.
Steel Manufacturing	In FY24, the production of crude steel grew at 15% reaching 143.6 MT whereas the production of finished steel production reached at 138.5 reflecting 14% y-o-y growth. The annual production of steel is anticipated to exceed 300 MT by 2030-31.	Higher demand for industrial machinery, automation equipment, and material handling systems.
Automotive Manufacturing	The Indian automotive manufacturing industry was valued at USD 84.6 billion in CY23, growing from USD 58.8 billion in CY20, with a CAGR of 12.9%. It is projected to grow to USD 113.5 billion by 2028, at a CAGR of 6.1%. According to a report by India Energy Storage Alliance, the Indian EV market is likely to increase at a CAGR of 36% until 2026.	Increased need for auto components, robotics, precision engineering, and electric vehicle infrastructure.
Oil and Gas	India's crude oil production in FY24 stood at 29.35 MMT whereas Natural gas production in FY24 stood at 35,717 MMSCM, indicating a growth of 6.1% from FY23. Indian refining capacity has increased from 215.1 MMTPA to 256.8 MMTPA in last 10 years and is expected to 309.5 MMTPA by 2028.	Rising demand for pumps, compressors, pipelines, drilling equipment, and process control systems.

Challenges

Challenges	**Description**
Raw Material Availability and Cost	India's engineering goods sector is grappling with significant challenges stemming from the volatility in prices and the availability of crucial raw materials like steel, copper, and aluminium. Fluctuations in the global market, disruptions in supply chains, and the country's dependence on imports leave manufacturers vulnerable to unpredictable material costs, which in turn

Challenges	Description
	impacts their production schedules and profitability. The rising costs of raw materials are squeezing profit margins, making it increasingly difficult for manufacturers to offer competitive prices. Additionally, supply chain disruptions due to geopolitical tensions or trade barriers lead to shortages, further complicating matters for manufacturers, especially small and medium enterprises (SMEs), which find it hard to absorb these costs and maintain operational efficiency.
Technological Advancements	Keeping up with technological advancements is a significant challenge for India's engineering goods sector. Manufacturers need to consistently innovate and embrace advanced technologies to stay competitive. Unfortunately, many small and medium-sized enterprises (SMEs) face difficulties in accessing high-end technologies due to financial limitations, which hampers their ability to boost productivity, enhance product quality, and lower production costs. This technological divide impacts operational efficiency and limits the sector's capacity to meet changing global standards, putting additional pressure on SMEs to compete with larger, more technologically advanced companies in both domestic and international markets.
Global Competition	India's engineering goods sector is up against fierce global competition, especially from countries like China that enjoy lower production costs, better infrastructure, and economies of scale. To stay competitive in the international market, Indian manufacturers need to enhance product quality, streamline production processes, and cut costs. The challenges are compounded by cost disadvantages, infrastructure shortcomings, and technological constraints. Consequently, Indian manufacturers, particularly small and medium enterprises (SMEs), find it difficult to compete with global players in terms of both price and quality.
Regulatory Environment	The engineering goods sector in India faces considerable challenges due to a complex regulatory environment. Manufacturers are required to adhere to numerous local and international standards, taxes, and tariffs, which can create operational difficulties, especially for small and medium-sized enterprises (SMEs) that may not have the resources to manage these requirements effectively. Moreover, frequent changes in government policies—such as those related to taxation, import/export regulations, and environmental standards—add to the uncertainty and disrupt business operations. This unpredictability in regulations makes long-term planning and investment decisions more complicated, further impeding growth in the sector.

5.4 Major Manufacturing Hubs in India

Manufacturing Hubs	States	Sector
Bharuch	Gujarat	Petroleum, petrochemicals, pharmaceutical, chemicals, fertiliser, metal fabrication, shipbuilding.
Ludhiana	Punjab	Apparel industry manufacturing woollen garments and hosiery apparel, hand tools and industrial equipment, bicycle manufacturing, bicycle parts and metals fabrication.
Moradabad	Uttar Pradesh	Handicraft
Firozabad	Uttar Pradesh	Glass and Glass products
Kanpur	Uttar Pradesh	Leather industry
Surat	Gujarat	Diamond cutting and polishing
Pimpri-Chinchwad	Maharashtra	Automobile and automotive parts
Kochi	Kerala	Seafood, fisheries, oil refining, spices.

Manufacturing Hubs	States	Sector
Tirupur	Tamil Nadu	Textiles
Chennai	Tamil Nadu	Automobile and automotive parts
Visakhapatnam	Andhra Pradesh	Steel, shipbuilding, pharmaceuticals, fertilisers, coffee, fishing, petrochemicals, refinery.
Raipur-Bhilai	Chhattisgarh	Mining, Steel and ancillary industries
Jamshedpur	Jharkhand	Iron and steel, auto parts
Taloja	Maharashtra	Chemical, Food and fish processing, dairy products and Electronics
The Mumbai-Pune Industrial Region	Maharashtra	Pharmaceuticals, electronics, and consumer goods manufacturing.

6 Indian Capital Goods Market

6.1 Overview

Capital goods consist of plant machinery, equipment and accessories required, either directly or indirectly, for manufacture or production of goods or for rendering services, including those required for replacement, modernization, technological upgradation and expansion of manufacturing facilities.

The Capital Goods industry is one of the key contributors to value added manufacturing and is significant for overall economic development of India. The Prime Minister's Group constituted under the Chairman of the National Manufacturing Competitiveness Council (NMCC) identified Capital Goods as one of the strategic sectors for strengthening national capabilities in the long-term.

The capital goods market In India is fragmented with majority of operational units in the Small and Medium Enterprise (SME) sector, beyond few large players. These are involved in low value-added fabrication and assembly works and cater to small segments of a sub-sector, often serving domestic demand only. Due to their low scale of operation, they are unable to compete effectively with large foreign competitors.

The Indian capital goods industry is made up of nine key sub-sectors, as shown in Table 3 below. The largest sub-sector by production is Heavy Electrical Equipment, followed by Earthmoving and Mining Machinery and Process Plant Equipment. The Heavy Electrical Equipment segment, which is the leading contributor to the industry, has seen a steady compound annual growth rate (CAGR) of 9.5% from FY19 to FY24, fuelled by increasing demand in power generation and transmission. Government initiatives aimed at boosting transmission capacity and enhancing state-level distribution networks have played a significant role in the growth of power distribution and transmission equipment, including transformers, conductors, meters, cables, and switchgear.

Programs like the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUJGY, 2016), Power for All, and the Integrated Power Development Scheme (IPDS) have been focused on improving electricity access in both urban and rural areas, benefiting companies involved in Transmission & Distribution (T&D) EPC projects. In FY24, authorities installed around 14,203 CKM of transmission lines and added 70,728 MVA of transformation capacity. On the other hand, the Earthmoving and Mining Machinery sector faced a notable decline, primarily due to decreased investments in mining infrastructure and a slowdown in infrastructure projects, worsened by delays in project awards during the general elections.

Meanwhile, the Process Plant Equipment segment, the third-largest contributor, remained relatively stable, showing slow but steady demand from industries such as chemicals, petrochemicals, and refineries. Delays in project execution and an increasing preference for modular and imported equipment have also impeded growth. Despite economic slowdowns and disruptions caused by the pandemic, the capital goods industry grew at a CAGR of 6.5% from FY19 to FY24. Looking ahead, ongoing investments in domestic manufacturing, technological advancements, and continued policy support will be essential for fostering further growth in the sector.

Table 8: Trend in production of Capital goods in India (Rs crores)

Sub-sector	FY19	FY20	FY21	FY22	FY23	FY24	CAGR
Heavy Electrical Equipment	1,93,781	1,79,199	1,67,349	2,16,389	2,44,300	3,05,058	9.5%
Earthmoving and Mining Machinery	38,900	31,028	29,139	28,616	37,551	13,243	-19.4%
Process Plant Equipment	27,400	29,250	21,938	24,000	23,415	27,396	0.0%
Dies, Moulds and Press Tools	13,600	13,682	12,294	13,128	13,915	15,600	2.8%

Sub-sector	FY19	FY20	FY21	FY22	FY23	FY24	CAGR
Printing Machinery	12,390	12,678	10,058	13,215	16,107	23,479	13.6%
Food Processing Machinery	8,750	7,547	10,250	12,210	13,203	13,863	9.6%
Machine Tools	9,612	6,152	6,602	9,307	11,956	13,571	7.1%
Textile Machinery	6,865	5,355	5,096	11,658	14,033	14,639	16.4%
Plastic Processing Machinery	3,100	2,350	3,710	3,850	3,912	4,310	6.8%
Total	**3,14,398**	**2,87,241**	**2,66,436**	**3,32,373**	**3,78,392**	**4,31,159**	**6.5%**

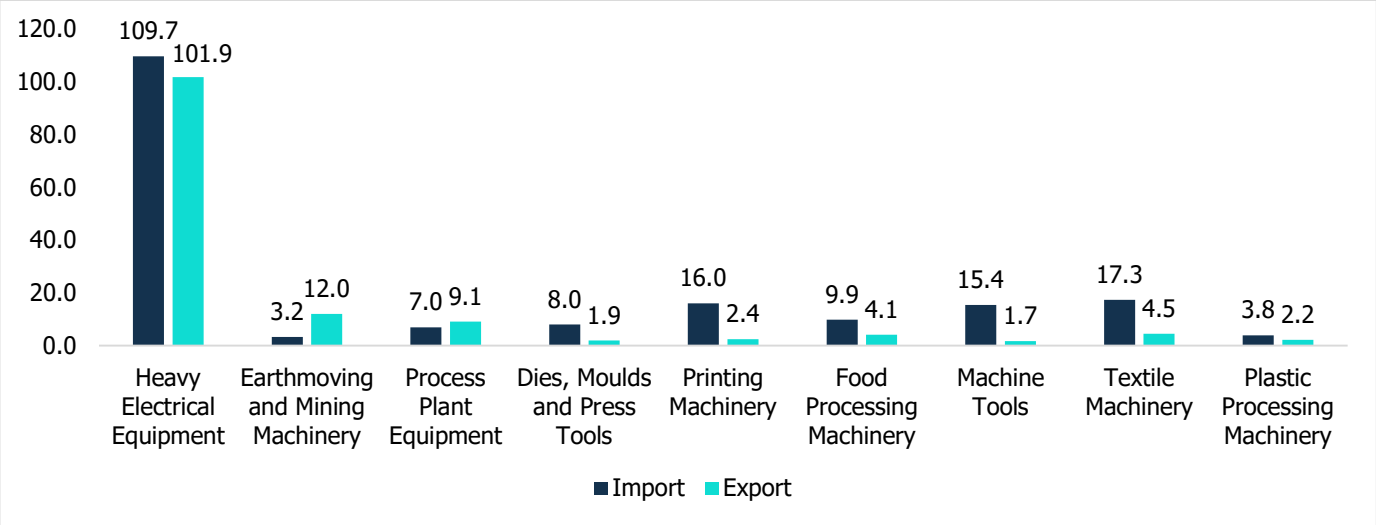
Source: Ministry of Heavy industries, IEEMA

6.2 Trade Dynamics

Imports

India is a net importer of capital goods across all but two sub-sectors, i.e. Earthmoving and Mining equipment and Process plant equipment. The sub-sector with highest net import is Machine Tool with value of Rs. 13,693 crore, which is followed by Printing Machinery and Textile Machinery with value of Rs. 13,598 crore and Rs. 12,860 crore respectively. Imports are gaining market share across sub-sectors, with almost 40% of domestic demand being met through imports. Around Rs 1,90,207 crore worth of capital goods were imported into India in FY24.

Chart 21: Import-export by sub-sectors in FY24 (Rs '000 Crores)



Source: Ministry of Heavy Industries, Indian Electrical and Electronics Manufacturers Association (IEEMA)

Imports increased by a CAGR of 8.8% during FY19-FY24, signifying consistent demand in the market but from sources outside India. Imports declined in FY21, likely due to pandemic-induced disruptions, but rebounded strongly from FY22 onwards, reaching Rs. 1,90,207 crores in FY24. This recovery suggests increasing demand for high-end technology and specialized machinery that may not yet be fully manufactured domestically. Food Processing Machinery and plastic machinery are the sectors that have recorded sharpest rise in imports with 15% and 24% respectively during this period. On the other hand, Earthmoving and Mining machinery sector has registered a fall in imports. The Heavy Electrical Equipment segment remains the largest imported sub-sector, growing at a CAGR of 9.0% from FY19 to FY24. This segment's import constitutes around 36% of the total demand. It is followed by Textile Machinery and Machine Tools growing at a CAGR of 9.8% and 4.4% respectively during this period.

Table 9: Trend in import of Capital Goods in India (Rs crores)

Sub-sector	FY19	FY20	FY21	FY22	FY23	FY24	CAGR
Heavy Electrical Equipment	71,309	67,937	63,840	81,422	1,01,180	1,01,874	9.0%
Earthmoving and Mining Machinery	5,600	4,812	1,336	1,345	1,530	3,217	-10.5%
Process Plant Equipment	4,200	4,650	3,024	3,500	6,317	6,950	10.6%
Dies, Moulds and Press Tools	5,500	6,356	6,000	6,382	6,701	8,000	7.8%
Printing Machinery	8,922	8,969	6,814	7,724	10,216	15,967	12.3%
Food Processing Machinery	4,742	4,487	1,965	5,610	7,038	9,864	15.8%
Machine Tools	12,390	10,288	5,965	7,397	13,671	15,352	4.4%
Textile Machinery	10,834	11,233	8,137	15,002	23,369	17,311	9.8%
Plastic Processing Machinery	1,304	914	1,860	3,024	3,477	3,828	24.0%
Total	**1,24,801**	**1,19,646**	**98,941**	**1,31,406**	**1,73,499**	**1,90,207**	**8.8%**

Source: Ministry of Heavy Industries, Indian Electrical and Electronics Manufacturers Association (IEEMA)

Exports

The Indian capital goods export sector has exhibited strong growth, with exports rising at a CAGR of 13.2% from FY19 to FY24. Despite a temporary dip in FY21, likely due to disruptions caused by the pandemic, exports rebounded significantly in subsequent years, reaching Rs. 1,39,685 crore in FY24. This growth reflects increasing global demand for Indian capital goods, improvements in domestic manufacturing capabilities, and government initiatives promoting exports. The surge in exports can also be attributed to India's efforts to diversify its export markets, enhance production quality, and leverage trade agreements. Machine Tools and Plastic machinery are the sectors that have recorded sharpest rise in exports with 19% and 54% respectively during FY19-FY24. The Heavy Electrical Equipment segment remains the largest exported sub-sector, growing at a CAGR of 14.0% from FY19 to FY24. It is followed by Process Plant Equipment and Earthmoving and Mining Machinery growing at a CAGR of 4.2% and 17.7% respectively during this period.

Table 10: Trend in exports of Capital Goods in India (Rs crores)

Sub-sector	FY19	FY20	FY21	FY22	FY23	FY24	CAGR
Heavy Electrical Equipment	52,910	60,697	58,379	72,634	94,170	1,01,874	14.0%
Earthmoving and Mining Machinery	5,300	3,583	1,814	2,792	2,963	11,990	17.7%
Process Plant Equipment	7,450	8,330	6,248	6,600	7,812	9,140	4.2%
Dies, Moulds and Press Tools	1,100	1,138	973	1,150	1,247	1,900	11.6%
Printing Machinery	1,180	1,230	1,012	1,312	1,597	2,369	15.0%
Food Processing Machinery	2,686	2,737	2,712	3,443	4,018	4,148	9.1%
Machine Tools	673	768	531	913	1,463	1,659	19.8%
Textile Machinery	3,665	3,127	3,097	4,970	5,836	4,451	4.0%
Plastic Processing Machinery	247	335	1,348	1,800	1,935	2,154	54.2%
Total	**75,211**	**81,945**	**76,114**	**95,614**	**1,21,041**	**1,39,685**	**13.2%**

Source: Ministry of Heavy Industries, Indian Electrical and Electronics Manufacturers Association (IEEMA)

6.3 Key Drivers and Challenges

Drivers	Challenges
• **Government Support:** Government initiatives and policy support play a crucial role in driving the growth of the capital goods sector in India. The Production-Linked Incentive (PLI) schemes for sectors such as electronics, semiconductors, and machinery manufacturing have significantly boosted domestic production and attracted global investments. Programs like Make in India and Atmanirbhar Bharat encourage self-reliance in manufacturing, reducing import dependence and strengthening local production capabilities. Additionally, the National Capital Goods Policy 2016 focuses on increasing domestic production, enhancing exports, and promoting advanced technology adoption in the sector. The government also provides extensive support for Micro, Small, and Medium Enterprises (MSMEs) through credit-linked subsidies and financial incentives, enabling smaller businesses to scale operations, invest in new machinery, and improve competitiveness in the market.	• **Dependence on Import:** One of the major challenges in the capital goods sector in India is its high dependence on imports for advanced machinery and equipment. During FY24, the imports reached at value of Rs. 1,90,207 crores. Despite government initiatives to boost domestic manufacturing, a significant portion of critical industrial machinery continues to be sourced from countries like China, Germany, and Japan due to limited indigenous production capabilities and technology gaps. This reliance on imports not only increases procurement costs but also affects India's goal of self-reliance in manufacturing. The lack of cutting-edge research and development, coupled with insufficient local expertise in high-end machinery production, further exacerbates this issue, making it difficult for Indian manufacturers to compete globally.
• **Infrastructure and Industrial Expansion:** Infrastructure and industrial expansion are major drivers of growth in the capital goods sector in India. The National Infrastructure Pipeline (NIP), with an investment of Rs. 111 lakh crore by 2025, is creating significant demand for capital goods across various industries. Rapid urbanization and smart city development, including metro projects and large-scale urban infrastructure initiatives, are further driving the need for advanced machinery and equipment. Additionally, the power sector is witnessing substantial growth, with increased investments in renewable energy, power transmission, and distribution, leading to higher demand for transformers, cables, and industrial equipment.	• **High Production Costs:** A significant challenge in the capital goods sector in India is the high cost of production, which makes domestic manufacturers less competitive compared to their global counterparts. The sector faces rising raw material costs, particularly for essential commodities like steel, aluminium, and copper, whose price fluctuations directly impact profitability. Additionally, high logistics expenses, energy costs, and inefficient supply chains further increase the overall cost of production. These factors create a pricing disadvantage for Indian manufacturers, limiting their ability to compete in both domestic and international markets. Without cost-effective manufacturing solutions and improved infrastructure, the sector struggles to achieve economies of scale and maintain sustainable growth.
• **Growth in Manufacturing & Core Sector:** The growth of manufacturing and core sectors is a key driver of the capital goods sector in India. Industries such as steel, cement, mining, and oil & gas are expanding rapidly, leading to increased demand for heavy machinery, automation solutions, and industrial equipment. The automobile sector, particularly the rise of electric vehicles (EVs), is further fuelling the need for robotic automation, CNC machines, and precision tooling equipment. Additionally, the pharmaceutical and chemical	• **Limited investment in R&D:** The capital goods sector in India faces a significant challenge due to limited investment in research and development, resulting in a lack of innovation and technological advancements. Many domestic manufacturers continue to rely on outdated machinery and traditional production methods, which reduces efficiency and productivity. This technological lag not only affects the quality and competitiveness of Indian capital goods but also increases dependence on imported high-tech equipment. Without substantial investment in cutting-

Drivers	Challenges
industries are witnessing significant investments in process equipment and industrial automation, enhancing efficiency and production capacity.	edge technologies, automation, and Industry 4.0 solutions, Indian manufacturers struggle to compete with global leaders in precision engineering and advanced manufacturing.
• **Digitalization and Industry 4.0 Adoption:** The adoption of digitalization and Industry 4.0 is a major growth driver for the capital goods sector in India. The increasing use of automation and robotics, including CNC machines, AI-driven manufacturing, and IoT-enabled machinery, is significantly enhancing productivity and operational efficiency. Advanced manufacturing technologies such as 3D printing, additive manufacturing, and digital twins are transforming production processes, enabling faster prototyping and precision engineering. Additionally, the emergence of smart factories powered by the Industrial Internet of Things (IIoT) is optimizing resource utilization, minimizing downtime, and improving overall manufacturing efficiency.	• **Low Export Competitiveness:** India's capital goods sector faces a significant challenge in terms of low export competitiveness, limiting its presence in global markets. Despite having a strong manufacturing base, quality concerns, lack of branding, and limited international market access hinder the sector's export growth. Additionally, high logistics costs, inefficient supply chains, and inadequate trade infrastructure further reduce India's ability to compete with global leaders like China, Germany, and Japan. Many Indian manufacturers also struggle with compliance to international standards and certifications, restricting their ability to tap into high-value export markets.

7 Company Profile of Jinkushal Industries Limited

7.1 Business Profile

Jinkushal Industries Limited (JKIPL) plays a significant role in India's construction equipment export market. Incorporated in 2007 and headquartered in Raipur, India, the company provides a wide range of export trading services including export trading of customized, modified, accessorized, new and refurbished pre-owned construction machinery, leasing and logistics. JKIPL offers wide range of construction equipment including hydraulic excavators, motor graders, backhoe loaders, rollers, telehandlers, wheel loaders, bulldozers, asphalt pavers, cranes, and pilling rigs etc. JKIPL is the largest Non-OEM construction equipment exporters. The company is recognized as Three-Star Export house by GOI and export's equipment to 30+ countries, including UAE, Mexico, Netherlands, Belgium, South Africa, Australia, and UK etc.

The company has dual business model of Export trading of Refurbished and New construction equipment to international markets through the following key operations –

Chart 22: Business Model

Export Trading of Customized, Accessorized New CE

- The company sources new brand-new construction machines from OEMs, dealers, and intermediary suppliers based on regional demand.
- The company enhances their value through customization, modification, or accessorization as per tailored requirements for specific geographies.

Export Trading of Refurbished Used CE

- The company procures pre-owned CE, refurbishes them either in-house or through contract refurbishment with suppliers, and then exports them to international markets.
- The company provides cost-effective solutions to markets where buyers seek reliable yet affordable alternatives to new equipment and also capitalizes on India's low-cost skilled labor and manufacturing ecosystem to ensure competitive pricing.

Export Trading of Proprietary Brand - HEXL

- The company launched their own brand, HEXL, under which they manufacture Backhoe Loaders.
- The trademark for this brand is applied but the approval is under process.

Other Services

- The company offers mining, logistics and leasing services.

Source: Company Disclosures, Note: CE- Construction Equipment

7.2 Distribution channel and USP of the company

Distribution channel of the company

JKIPL has developed a strong, structured, and highly scalable distribution network that enables seamless global sales and procurement operations. The company's distribution strategy is built around direct exports, regional dealer partnerships, and localized customization hubs, ensuring efficiency and market reach across 30+ countries.

- **Direct Global Distribution Model**

The company follows a direct global distribution model, selling construction equipment internationally to contractors, rental companies, and infrastructure firms. Efficient logistics operations ensure timely deliveries and seamless transactions, while direct buyer relationships eliminate intermediaries, allowing for better pricing, greater control, and enhanced customer engagement.

- **Regional Dealer and Distributor Network**

JKIPL partners with established distributors and dealers in key global markets to expand its reach and drive sales. These partners manage local market demand, provide customer support, and contribute to regional marketing efforts. The multi-tiered distribution system ensures flexibility in pricing and sales structures, catering to region-specific requirements for optimized market penetration.

- **Online and Auction-Based Sales Model**

JKIPL leverages global online platforms and equipment auctions to facilitate remote bidding and purchasing, expanding access to a wider customer base in both developed and emerging markets. This digital sales approach brings out best price discovery, enhances market reach, ensures competitive pricing, and provides buyers with a convenient and transparent purchasing experience.

- **Expansion through International Offices**

JKIPL is establishing international offices with localized sales and procurement teams to strengthen its global presence. These offices based in UAE and USA will cater to region-specific buying trends, enhance customer relationships, and provide improved after-sales support, ensuring a more responsive and market-focused distribution approach.

- **Customization and Accessorizing of Equipment for Regional Markets**

JKIPL tailors construction equipment to meet regional regulatory and operational requirements before export. Customization centres enable pre-shipment enhancements, including climate-specific modifications, safety upgrades for high-regulation markets, and accessory integrations such as breaker piping kits, quick couplers, and fire suppression systems. This ensures machines are optimized for local market needs, enhancing performance and compliance.

USP of the company

JKIPL's competitive edge is built upon its strategic business model, and innovative approach to construction equipment sales. The company's USPs differentiate it from both standard trading businesses and traditional OEM-driven equipment suppliers.

Chart 23: USP of the company

Leading player in Non-OEM Exports	Multifaceted Business Model	Value Driven Customization and Engineering
• Largest Non-OEM exporter in construction equipment • Recognized as Three Star Export House by Government of India. • Presence across 30+ countries	• Export trading of Customized, Accessorized New Construction Equipment • Export trading of Refurbished Used Construction Equipment • Export Trading with Launch of Own Brand Construction Machines	• The company adds value through refurbishment and customization processes, ensuring machines meet buyer standards. • Customization includes breaker piping kits, AC systems, safety modifications, attachment integrations etc.

7.3 Product Offering of the company

Table 11: Product Portfolio

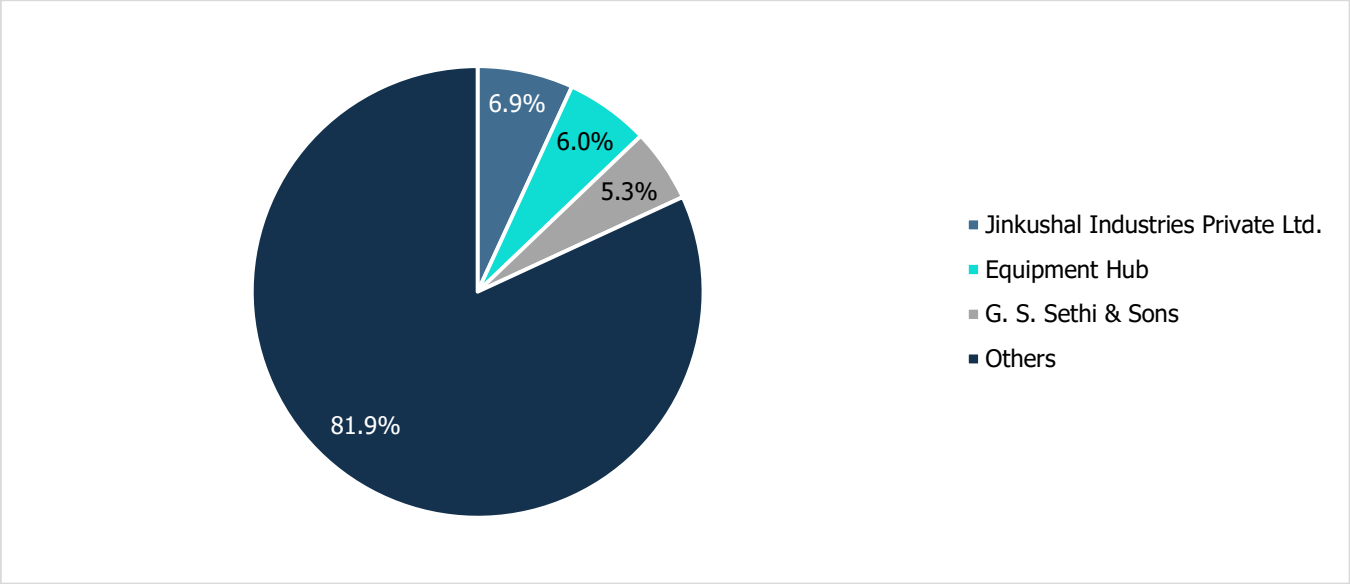
Sr No	Products	Used Equipment Models	New Equipment Models
1.	**Backhoe Loaders**		CASE 770EX CASE 570 SV JCB 3DX HexL 420X
2.	**Cranes**	Terex RT780 Terex RT1100 XCMG XCT80	
3.	**Dozers**	CAT D8R CAT D6R CAT D6R2 CAT D8R CAT D8T	
4.	**Excavators**	CAT 330C CAT 323D3 CAT 320D CAT 330BL CAT 321DLCR CAT 314DLCR	CAT 316GC Hyundai R210 CAT 320D3
5.	**Motor Graders**	CAT 140H CAT 120 CAT 140K2 CAT 120 CAT 140K	CAT 140GC
6.	**Pavers**	Wirtgen SP500	
7.	**Piling Rig**	SOILMEC SR40	
8.	**Rollers**		CASE 1107 EX DYNAPAC CC425 Hamm HC119i
9.	**Telehandlers**	JCB 540-170 JCB 530-70 JCB 530-110	
10.	**Wheel Loaders**	CAT 950GC CAT 966K CAT 950H	

Source: Company Website

7.4 Export of Non-OEM Construction equipment

Jinkushal Industries Limited has established itself as one of the leading exporters of construction equipment in Non-OEM category in India. JKIPL leads the Non-OEM export market with 6.9% share. Equipment Hub and G.S Sethi & Sons holds 6.0% share and 5.3% share respectively. The remaining 81.9% of the market is held by various other companies.

Chart 24: Export of Construction Equipment by Non-OEM players



Source: S&P Global

8 Competitive Landscape

8.1 Jinkushal Industries Limited

- **Year of Incorporation:** 2007
- **Headquarters:** Raipur, Chhattisgarh, India
- **Description:** Jinkushal Industries Limited (JKIPL) incorporated in 2007 is largest Non-OEM construction equipment exporters. The company is engaged in business of export trading services of used and new construction equipment, mining, leasing and logistics services. The company is recognized as Three-Star Export house by the GOI and export's equipment to 30+ countries
- **Key Services:** Export trading of customized, modified, accessorized, new and refurbished pre-owned construction machines of other brands and own brand, mining, leasing and logistics.
- **Types of Equipment offered:** Hydraulic excavators, Motor graders, backhoe loaders, Soil compactors, wheel loaders, Bulldozers, Asphalt pavers, Cranes, and Mining dump trucks**.**
- **Revenue Classification:** The company majorly depends on International markets and generates 99% revenue from exports.
- **Export Revenue:** Rs**.** 3,781.3 million (As of FY25)
- **Export Countries:** The company exports in 30+ countries, including UAE, Mexico, Netherlands, Belgium, South Africa, Australia, and UK

Financial Profile (Consolidated)

Particulars	FY23	FY24	FY25
Revenue (Rs. Million)	2,334.5	2,385.9	3,805.6
EBITDA (Rs. Million)	142.4	233.6	233.5
EBITDA Margin (%)	6.1%	9.8%	6.1%
PAT (Rs. Million)	101.2	186.4	191.4
PAT Margin (%)	4.3%	7.7%	5.0%
Debt/Equity	0.7	1.1	0.6
ROE (%)	51.95%	55.19%	29.61%
ROA (%)	20.9%	17.0%	10.7%
ROCE (%)	34.4%	30.0%	19.6%
Net Debt (Rs. Million)	47.7	379.8	492.0
Revenue CAGR (FY23-FY25) (%)	27.7%		

Source: Company's disclosures

8.2 Action Construction Equipment Limited

- **Year of Incorporation:** 1995
- **Headquarters:** Faridabad, Haryana, India
- **Description:** Action Construction Limited (ACE) is material handling and construction equipment manufacturing company with a majority market share in Mobile Cranes and Tower Cranes segment. The company is engaged in the

business of manufacturing and marketing of hydraulic mobile cranes, mobile tower cranes, material handling equipment, road construction equipment and agriculture equipment. The manufacture a wide and diverse range of equipment primarily used by major infrastructure and construction companies, heavy engineering and industrial projects, logistics and warehousing companies in India.

- **Key Services:** Manufacturing of Cranes and other Construction Equipment and Rental Services.
- **Types of Equipment offered:** Mobile Cranes, Truck Mounted Cranes, Crawler Cranes, Rough Terrain Hydraulic Mobile Crane, Forklift Trucks, Mobile Tower Cranes, Tower Cranes, Concrete Placing Boom, Piling Rigs, Backhoe Loaders, Road Equipment, Vibratory Loaders, Loaders, Warehousing Equipment, Tractors, Agri Equipment.
- **Revenue Classification:** The company majorly depends on Domestic markets and generates 3.5% revenue from exports.
- **Export Revenue:** Rs. 1,177.8 million (As of FY25)
- **Export Countries/ Region:** Middle East, Africa, Asia and Latin America.

Financial Profile (Consolidated)

Particulars	FY23	FY24	FY25
Revenue (Rs. Million)	21,596.8	29,138.0	33,270.5
EBITDA (Rs. Million)	2,209.2	4,032.5	5,057.6
EBITDA Margin (%)	10.2%	13.8%	15.2%
PAT (Rs. Million)	1,729.8	3,282.0	4,092.4
PAT Margin (%)	7.9%	11.0%	11.9%
Debt/Equity	0.01	0.003	0.009
ROE (%)	20.7%	30.6%	28.8%
ROA (%)	10.8%	15.1%	15.1%
ROCE (%)	26.0%	36.8%	35.3%
Net Debt (Rs. Million)	-427.5	-1,065.3	-406.8
Revenue CAGR (FY23-FY25) (%)	24.1%		

Source: Company's disclosures

8.3 Vision Infra Equipment Solution Limited

- **Year of Incorporation:** 2024
- **Headquarters:** Pune, Maharashtra, India
- **Description:** Vision Infra Equipment Solution Limited (VIESL) started as a family business engaged in the refurbishment of commercial vehicles. The company is engaged in leasing, renting, refurbishing, and selling road construction equipment and other types of construction machinery. VIESL also manage works contracts, projected crushing, soil stabilization, recycling, milling, and paving. The company provides services in the fields of airports, smart cities, irrigation, buildings and factories, mining, railroads, etc.
- **Key Services:** Renting, trading, selling and refurbishment of construction equipment.
- **Types of Equipment offered:** Wheel loader, Transit Mixer, Paver, Diesel Generator, Tower Light Source, Rock Breaker, Crusher, Road Milling Machine, etc and company also provides rental equipment which includes Crushers, Milling Machines, Soil Stabilizer, Sensor Paver, Boom Placer, Pad foot Roller, Excavator, DG sets, etc.

- **Revenue Classification:** The company majorly depends on Domestic markets and generates 51.8% revenue from exports.
- **Export Revenue:** Rs. 2,297.2 million (as of FY25)
- **Export Countries:** Asia, Europe, North America, South America, Africa, Australia.

Financial Profile (Consolidated)

Particulars	FY23	FY24	FY25
Revenue (Rs. Million)	3,598.1	3,327.5	4,432.7
EBITDA (Rs. Million)	559.7	823.8	1,189.5
EBITDA Margin (%)	15.6%	24.8%	26.8%
PAT (Rs. Million)	91.9	266.9	340.5
PAT Margin (%)	2.5%	7.6%	7.5%
Debt/Equity	5.0	11.3	1.7
ROE (%)	33.3%	100.6%	36.3%
ROA (%)	3.7%	7.5%	6.6%
ROCE (%)	17.3%	20.0%	17.0%
Net Debt (Rs. Million)	1,475.0	2,528.9	2,707.1
Revenue CAGR (FY23-FY25) (%)	11.0%		

Source: Company's disclosures

8.4 Bull Machines Pvt Limited

- **Year of Incorporation:** 1988
- **Headquarters:** Coimbatore, India
- **Description:** Bull Machines Pvt Limited is a prominent player in the construction equipment sector, specializing in manufacturing tractor attachments and backhoe loaders. The company serves to the major sectors such as construction, agriculture, roads and mining etc. Bull machines exports equipment to 65+ countries and 2,100+ employees.
- **Key Services:** Manufacturing of tractor attachments and backhoe loaders
- **Types of Equipment offered:** Tractor attachments and backhoe loaders
- **Revenue Classification:** The company majorly depends on Domestic markets and generates 38.5% revenue from exports.
- **Export Revenue:** Rs. 3,457.4 million (as of FY24)
- **Export Countries:** Asia, Europe, Mexico, South America, Middle East and Africa.

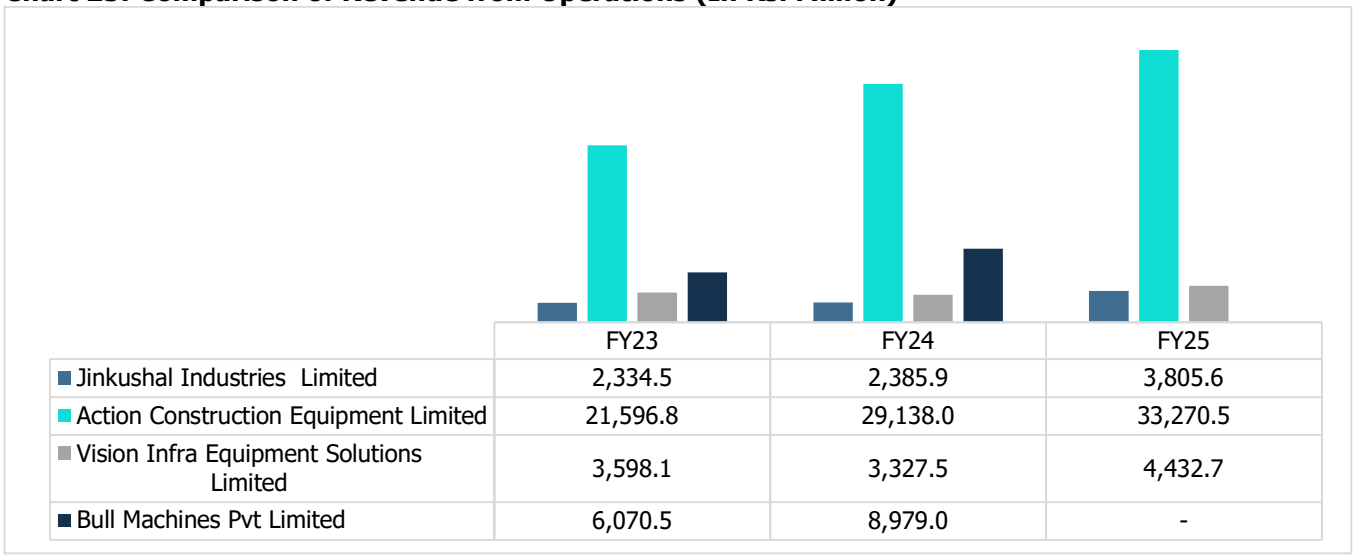
Financial Profile (Consolidated)

Particulars	FY23	FY24	FY25
Revenue (Rs. Million)	6,070.5	8.979.0	-
EBITDA (Rs. Million)	669.8	1,281.7	-
EBITDA Margin (%)	11.0%	14.3%	-
PAT (Rs. Million)	1,346.7	1,011.5	-

PAT Margin (%)	21.9%	11.1%	-
Debt/Equity	0.2	0.02	-
ROE (%)	30.4%	13.5%	-
ROA (%)	49.1%	25.0%	-
ROCE (%)	44.7%	55.9%	-
Net Debt (Rs. Million)	-152.9	-667.4	-
Revenue CAGR (FY23-FY25) (%)	N.A.		

Source: Company's disclosures

Chart 25: Comparison of Revenue from Operations (In Rs. Million)

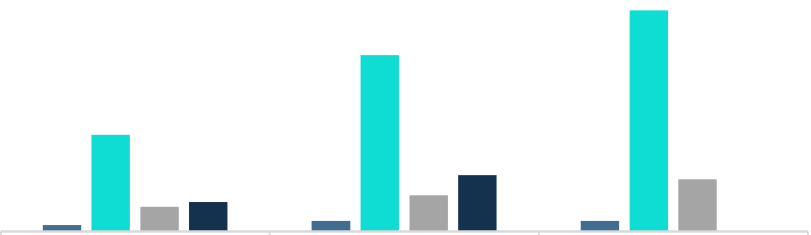


	FY23	FY24	FY25
Jinkushal Industries Limited	2,334.5	2,385.9	3,805.6
Action Construction Equipment Limited	21,596.8	29,138.0	33,270.5
Vision Infra Equipment Solutions Limited	3,598.1	3,327.5	4,432.7
Bull Machines Pvt Limited	6,070.5	8,979.0	-

Source: Company's disclosures

JKIPL reported Rs. 3,805.6 million in Revenue from Operations for FY25. On a year-on-year basis, JKIPL achieved an 59.5% growth in revenue.

Chart 26: Comparison of EBITDA (In Rs. Million)

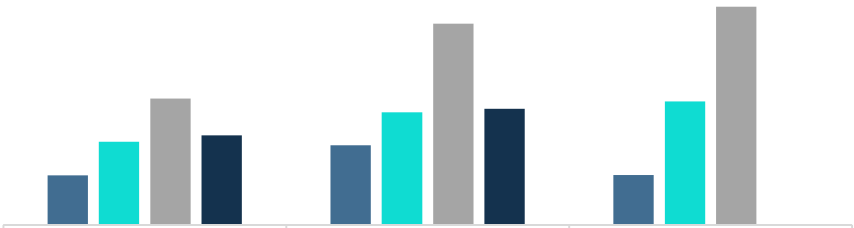


	FY23	FY24	FY25
Jinkushal Industries Limited	142.4	233.6	233.5
Action Construction Equipment Limited	2,209.2	4,032.5	5,057.6
Vision Infra Equipment Solutions Limited	559.7	823.8	1,189.5
Bull Machines Pvt Limited	669.8	1,281.7	-

Source: Company's disclosures

In terms of EBITDA, JKIPL reported Rs. 233.5 million in FY25. During the FY23-25, EBITDA expanded at a CAGR of 28.1%.

Chart 27: Comparison of EBITDA Margin (In %)

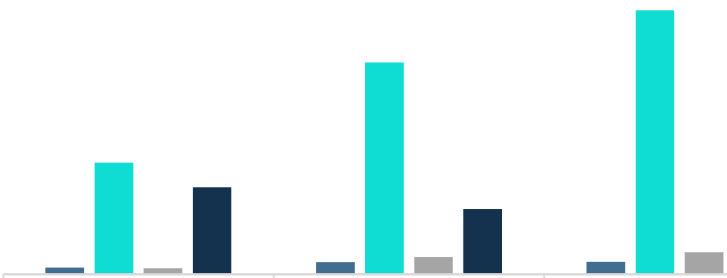


	FY23	FY24	FY25
Jinkushal Industries Limited	6.1%	9.8%	6.1%
Action Construction Equipment Limited	10.2%	13.8%	15.2%
Vision Infra Equipment Solutions Limited	15.6%	24.8%	26.8%
Bull Machines Pvt Limited	11.0%	14.3%	-

Source: Company's disclosures

In terms of EBITDA margin, JKIPL ranks third with three-years average margin of 7.3%.

Chart 28: Comparison of PAT (In Rs. Million)

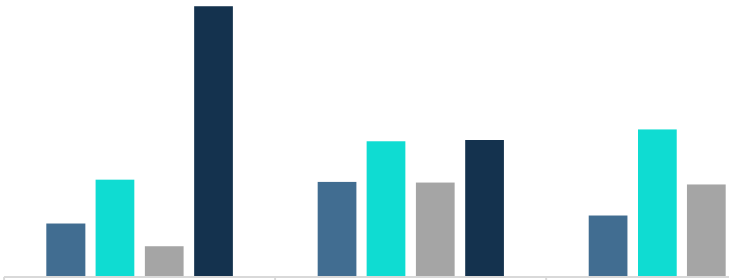


	FY23	FY24	FY25
Jinkushal Industries Limited	101.2	186.4	191.4
Action Construction Equipment Limited	1,729.8	3,282.0	4,092.4
Vision Infra Equipment Solutions Limited	91.9	266.9	340.5
Bull Machines Pvt Limited	1,346.7	1,011.5	-

Source: Company's disclosures

JKIPL reported Rs. 191.4 million in PAT for FY25. On a year-on-year basis, JKIPL achieved 2.7% growth in PAT.

Chart 29: Comparison of PAT Margin (In %)

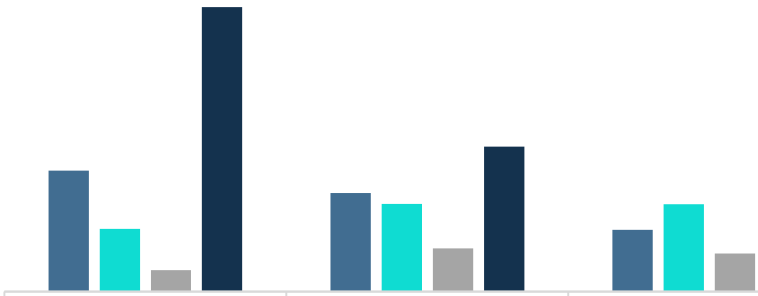


	FY23	FY24	FY25
Jinkushal Industries Limited	4.3%	7.7%	5.0%
Action Construction Equipment Limited	7.9%	11.0%	11.9%
Vision Infra Equipment Solutions Limited	2.5%	7.6%	7.5%
Bull Machines Pvt Limited	21.9%	11.1%	-

Source: Company's disclosures

In terms of PAT margin, JKIPL ranks third with three-years average margin of 5.7%.

Chart 30: Comparison of ROA (In %)

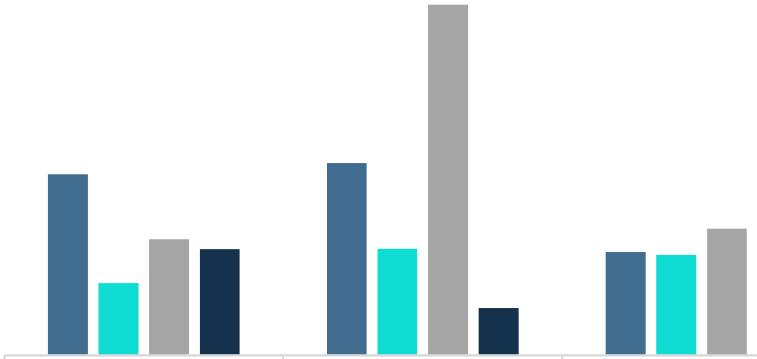


	FY23	FY24	FY25
Jinkushal Industries Limited	20.9%	17.0%	10.7%
Action Construction Equipment Limited	10.8%	15.1%	15.1%
Vision Infra Equipment Solutions Limited	3.7%	7.5%	6.6%
Bull Machines Pvt Limited	49.1%	25.0%	-

Source: Company's disclosures

Comparing the Return on Asset, JKIPL achieved the second highest ROA in FY25 at 10.7%.

Chart 31: Comparison of ROE (In %)

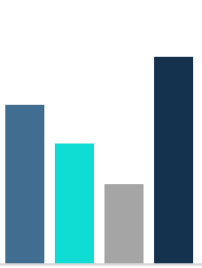


	FY23	FY24	FY25
Jinkushal Industries Limited	52.0%	55.2%	29.6%
Action Construction Equipment Limited	20.7%	30.6%	28.8%
Vision Infra Equipment Solutions Limited	33.3%	100.6%	36.3%
Bull Machines Pvt Limited	30.4%	13.5%	-

Source: Company's disclosures

In terms of ROE, JKIPL ranks seconds among the peers in FY25 at 29.6%

Chart 32: Comparison of ROCE (In %)

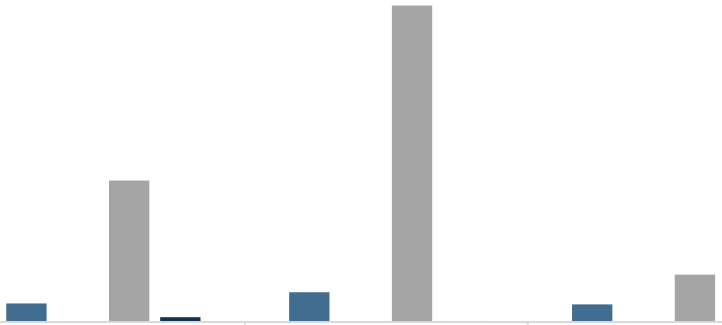


	FY23	FY24	FY25
Jinkushal Industries Limited	34.4%	30.0%	19.6%
Action Construction Equipment Limited	26.0%	36.8%	35.3%
Vision Infra Equipment Solutions Limited	17.3%	20.0%	17.0%
Bull Machines Pvt Limited	44.7%	55.9%	-

Source: Company's disclosures

Comparing the ROCE, JKIPL achieved the second highest ROCE in FY25 at 19.6%.

Chart 33: Comparison of D:E Ratio (In Times)

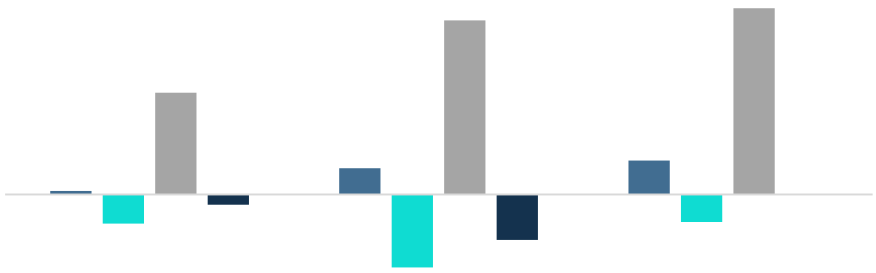


	FY23	FY24	FY25
Jinkushal Industries Limited	0.7	1.1	0.6
Action Construction Equipment Limited	0.0	0.0	0.0
Vision Infra Equipment Solutions Limited	5.0	11.3	1.7
Bull Machines Pvt Limited	0.2	0.0	-

Source: Company's disclosures

In FY25, JKIPL's Debt-to-Equity Ratio was 0.6x.

Chart 34: Comparison of Net Debt (In Rs. Million)



	FY23	FY24	FY25
Jinkushal Industries Limited	47.7	379.8	492.0
Action Construction Equipment Limited	-427.5	-1065.3	-406.8
Vision Infra Equipment Solutions Limited	1,475.0	2,528.9	2,707.1
Bull Machines Pvt Limited	-152.9	-667.4	-

Source: Company's disclosures

In FY25, JKIPL's Net Debt was Rs. 492.0 million

Abbrevations	
GDP	Gross Domestic Product
GVA	Gross Value Added
BRI	Belt and Road Initiative
DeFi	Decentralized Finance
Evs	Electric Vehicles
RBI	Reserve Bank of India
FDI	Foreign Direct Investment
RCEP	Regional Comprehensive Economic Partnership
USMCA	United States-Mexico-Canada Agreement
WEO	World Economic Outlook
IMF	International Monetary Fund
CY	Calendar Year
P	Projections
AI	Artificial Intelligence
IoT	Internet of Things
FRE	First Revised Estimates
PE	Provisional Estimate
FAE	First Advance Estimates
MOSPI	Ministry of Statistics and Programme Implementation
PMI	Purchasing Managers' Index
CPI	Consumer Price Index
MPC	Marginal Propensity to Consume
IIP	Index of Industrial Production
Y-O-Y	Year- On- Year Growth
FY	Financial Year
CE	Construction equipment
SME	Small and Medium Enterprises
ICEMA	Indian Construction Equipment Manufacturers Association
CMIE	Centre for Monitoring Indian Economy
GPS	Global Positioning System
BIM	Building Information Modelling
R	Revised
B	Budget
PSU	Public Sector Undertaking
MoCA	Ministry of Civil Aviation
NIP	National Infrastructure Pipeline
Capex	capital expenditure
km	kilometers
EPC	Engineering, procurement, and construction
DFC	Dedicated Freight Corridors
RRTS	Regional Rapid Transit System
HSR	High-Speed Rail
PPP	Public-Private Partnership
MFC	multifunctional complexes
PMAY	Pradhan Mantri Awas Yojna
BFSI	Banking, Financial Services, and Insurance
RoDTEP	Remission of Duties and Taxes on Exported Products
CBIC	Central Board of Indirect Taxes & Customs

MAI	Market Access Initiative
AIR	all-industry rate
MTT	Merchant Trade Transactions
FTP	Foreign Trade Policy
SEZs	Special Economic Zones
CAGR	Compounded Annual Growth Rate
MW	Megawatt
EU	European Union
OEM	original equipment manufacturer
EMIS	Education Management Information System
APAC	Asia- Pacific
MEA	Middle East & Africa
MMDR Act	Mine and Minerals (Development and Regulation) Amendment Act
EEA	European Environment Agency
DPFs	diesel particulate filters
NOx	nitrogen oxide
PM	particulate matter
SAW	submerged-arc welded
ERW	electrical resistance welded
EEPC India	Export Promotion Council of India
EPCG	Export Promotion Capital Goods
FTP	Foreign Trade Policy
WANA	West Asia and North Africa
SSA	Sub Saharan Africa
CIS	Commonwealth of Independent States
ASEAN	Association of Southeast Asian Nations
UAE	United Arab Emirates
FTAs	free trade agreements
MSMEs	Micro, Small and Medium Enterprises
CLCSS	Credit Linked Capital Subsidy Scheme
GW	Gigawatt
MT	Metric Tones
MMT	Million Metric Tons
MMTPA	Million Metric Tonnes Per Annum
NMCC	National Manufacturing Competitiveness Council
DDUJGY	Deen Dayal Upadhyaya Gram Jyoti Yojana
T&D	Transmission & Distribution
IPDS	Integrated Power Development Scheme
CKM	Circuit kilometer
MVA	megavolt-amperes
IEEMA	Indian Electrical & Electronics Manufacturers' Association
PLI	Production-Linked Incentive
CNC	Computer numerical control
IIoT	Industrial Internet of Things
JKIPL	Jinkushal Industries Limited
GOI	Government of India machine
USA	United States of America
UK	United Kingdom
USP	Unique Selling Proposition
BEML Ltd	Bharat Earth Movers Limited
ACE	Action Construction Equipment Limited

VIESL	Vision Infra Equipment Solution Limited
USD	United States Dollar

Formula Sheet

Parameter	Formula
Revenue	Revenue from Operations
Total Income	Revenue from Operations + Other Income
EBITDA	Depreciation + Finance Cost+ Profit (Loss) before tax- Other Income
EBIT	Profit before tax + Interest expenses
EBITDA Margin	EBITDA/ Revenue from operations
PAT Margin	Profit after Tax/ Total Income
Debt	Long term Borrowings + Short term Borrowings
Total Equity	Equity Share Capital+ Other Equity + reserves & surplus
Capital Employed	Total Debt + Total Equity + Deferred Tax Liability (Net)
Net Debt	Total Debt - Cash and Cash equivalent
Debt to Equity	Debt/ Total Equity
Return on Equity (ROE)	PAT/ Average Equity
Return on Assets (ROA)	PAT/ Total Assets
Return on Capital Employed (ROCE)	EBIT/ Capital Employed

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