

The stainless steel products industry

Draft Report

Submitted to Jay Jagdamba Limited

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Global macroeconomic overview

GDP trend

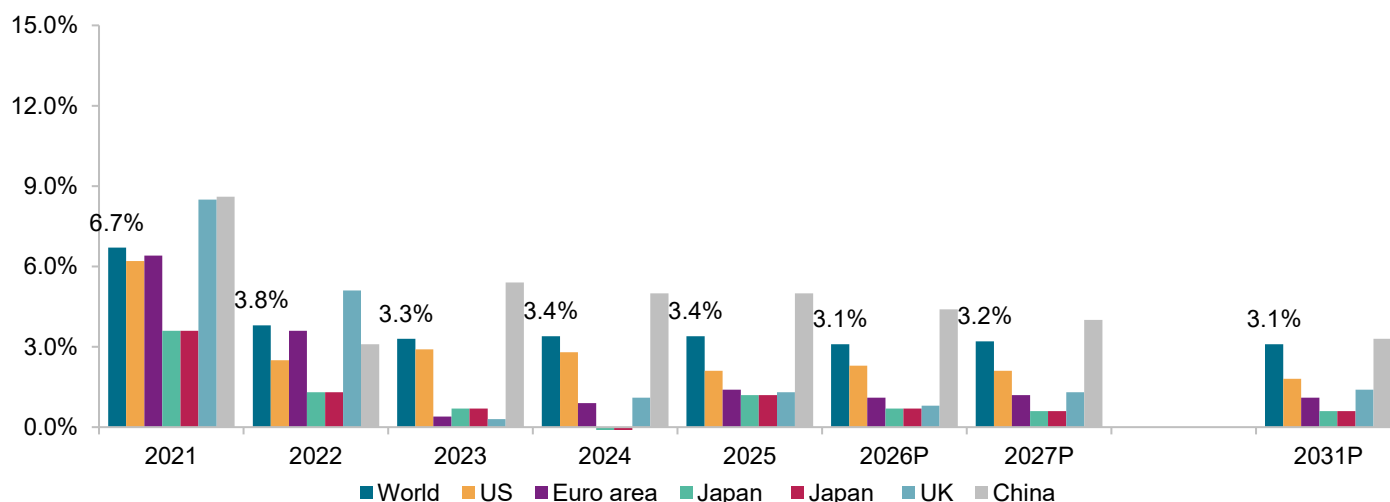
In calendar years 2026 and 2027, global gross domestic product (GDP) growth is projected to be below the annual average of 3.8% logged in the pre-pandemic decade of 2000-2019, reflecting geopolitical tensions, high inflation and tightening monetary policies.¹

Tracing back the trend, global GDP growth had contracted 2.7% in 2020 because of the pandemic. In 2021, the growth rebounded to 6.7% as vaccines and continued fiscal support nursed the economy back to health but slowed again to 3.8% and 3.3%, respectively, owing to challenges such as inflation driven by supply constraints, tightening financial conditions, long-term effects of the pandemic and geopolitical uncertainties. In 2024 and 2025, growth remained stable at 3.4%.

Five-year historical data and growth forecast

The IMF estimates global GDP growth to be 3.1% in 2026 and 3.2% in 2027 because of geopolitical uncertainties. Regional economic outlook has been revised owing to recent shocks and policies. The growth estimates for the Middle East, Central Asia and Sub-Saharan Africa have been lowered because of cuts in commodity production, and conflicts and unrest. In contrast, growth in emerging Asia has been stronger, driven by surging demand for semiconductors and electronics, fuelled by artificial intelligence (AI) investments.²

Economic review and outlook (on-year growth rate)



P - projected

Note: Years in the horizontal axis correspond to the calendar year Source: Crisil Intelligence, IMF, World Bank and S&P Global

Source: Crisil Intelligence, IMF, World Bank and S&P Global

Region-wise and country-wise economic review and outlook³

Real GDP growth (on-year)	2021	2022	2023	2024	2025	2026P	2027P	2031P
World	6.70%	3.80%	3.30%	3.40%	3.40%	3.10%	3.20%	3.10%

Note: The report uses calendar years unless mentioned otherwise, but India's data is for fiscal (i.e., 2020 being fiscal 2021 and so on)

¹ IMF – World Economic Outlook April 2026

² All outlook given by the IMF unless stated otherwise

³ All classifications according to the IMF

Euro area*	6.40%	3.60%	0.40%	0.90%	1.40%	1.10%	1.20%	1.10%
Emerging and developing Asia	7.80%	4.70%	5.60%	5.40%	5.50%	4.90%	4.80%	4.50%
Emerging and developing Europe	7.20%	0.50%	3.60%	3.80%	2.00%	2.00%	2.10%	2.30%
Latin America and Caribbean	7.50%	4.30%	2.30%	2.40%	2.40%	2.30%	2.70%	2.60%
Middle East and Central Asia	4.70%	6.40%	2.60%	2.80%	3.60%	1.90%	4.60%	3.80%
Sub-Saharan Africa	3.90%	4.40%	3.80%	4.20%	4.50%	4.30%	4.40%	4.70%

*The euro area consists of member-states of the European Union that have adopted the euro as their currency

P - projected

Note: Calendar year data

Source: Crisil Intelligence, industry and IMF

Real GDP growth (on-year)	2021	2022	2023	2024	2025	2026P	2027P	2031P
US	6.20%	2.50%	2.90%	2.80%	2.10%	2.30%	2.10%	1.80%
China	8.60%	3.10%	5.40%	5.00%	5.00%	4.40%	4.00%	3.30%
Germany	3.90%	1.80%	-0.90%	-0.50%	0.20%	0.80%	1.20%	0.60%
Japan	3.60%	1.30%	0.70%	-0.20%	1.20%	0.70%	0.60%	0.60%
India	9.70%	7.60%	7.20%	7.10%	7.60%	6.50%	6.50%	6.50%
UK	8.50%	5.10%	0.30%	1.10%	1.30%	0.80%	1.30%	1.40%
France	6.80%	2.80%	1.60%	1.10%	0.90%	0.90%	0.90%	1.10%
Italy	8.90%	4.80%	0.90%	0.80%	0.50%	0.50%	0.50%	0.70%
Canada	6.00%	4.70%	2.00%	2.00%	1.70%	1.50%	1.90%	1.80%
Brazil	4.80%	3.00%	3.20%	3.40%	2.30%	1.90%	2.00%	2.50%

P - projected

Note: Calendar year, except India, which is fiscal year (i.e., 2021 being fiscal 2022 and so on)

Source: Crisil Intelligence, industry and IMF

The GDP growth trajectory varies for key economies and regions, as detailed below.

United States (US)

The country's GDP growth expanded to 2.9% in 2023 from 2.5% in 2022 because of high inflation and the consequent hike in interest rates by the Federal Reserve (Fed), which impacted spending. In 2024, the economy grew 2.8% because of strong consumption and non-residential investment, driven by rising real wages and wealth effects. However, growth is expected to expand 2.3% in 2026 on the back of fiscal policy support and interest rate cuts in 2025⁴.

Euro area

The euro area's growth slowed to 0.4% in 2023 owing to geopolitical issues, tighter financial conditions and high gas prices. Growth recovered to 0.9% in 2024 and 1.4% in 2025, driven by improved exports, rising real wages and looser monetary policy. In 2026, growth is expected to decline to 1.1% as a result of a rise in energy prices due to the conflict in the Middle East.

⁴ All forecasts are by the IMF unless stated otherwise

Japan

In 2023, Japan's economy grew 0.7%, driven by pent-up demand, tourism and accommodative policies. However, growth is expected to slip to 0.7% in 2026 from 1.2% in 2025 on higher energy prices and weaker external demand.

United Kingdom (UK)

The UK's growth slowed to 0.3% in 2023 owing to tight monetary policy and high energy prices, despite the support of a 2022 fiscal package. Growth accelerated to 1.1% in 2024 and 1.3% in 2025, driven by falling inflation and interest rates, which stimulated domestic demand. Growth is projected to decline to 0.8% in 2026 due to the Middle East conflict and a slower pace of monetary easing.

China

China's GDP grew at 8.6% in 2021, driven by pent-up demand and strong exports. Growth was steady at 5% in 2024 and 2025, supported by better-than-expected net exports. In 2026, 4.4% growth is projected on lower US tariff rates and stimulus measures to offset the impact of the Middle East conflict.

India

After the pandemic, the country's economic growth rebounded to 9.7%, 7.6% and 7.2% in fiscal 2022, 2023 and 2024, respectively. Growth remained steady in fiscal 2024 at 7.1% before rising to 7.6% in fiscal 2026. Growth in fiscal 2027 is projected at 6.5% due to a persistent rise of energy prices, which would be somewhat offset by the lowering of US tariffs.

Middle East and Central Asia

The Middle Eastern and Central Asian economy contracted in 2020 but rebounded to grow at 4.7% and 6.4% in 2021 and 2022, respectively. Growth slowed to 2.6% in 2023 before picking up 2.8% in 2024 and 3.6% in 2025. The 2026 projection was cut to 1.9% as the region faces the most direct impact of the conflict.

Sub-Saharan Africa

Sub-Saharan Africa's GDP contracted in 2020, then grew 3.9% in 2021 and 4.4% in 2022. Growth slowed to 3.8% in 2023 before expanding to 4.5% in 2025. It is projected to remain stable at 4.3% in 2026, masking variation across countries in the region adversely affected by the conflict in the Middle East.

Latin America and the Caribbean

The Latin American and the Caribbean region grew 2.4% in both 2025 and 2024 and 2.3% in 2023. In 2026, growth is projected to remain stable at 2.3% on account of the conflict. However, a positive impact is expected as the region is a net energy exporter.

The GDP growth data reveals distinct patterns across major economies. India emerges as a standout performer, maintaining robust growth projections of 6.5% through 2031 despite rising energy prices. Though China's growth is strong, it is projected to decelerate to 3.3% by 2031 from 8.4% in 2021, reflecting its economic maturation.

The divergence between emerging and developed economies is particularly striking in the recovery patterns. While emerging markets such as India demonstrate a resilient growth momentum, developed nations show a clear trend toward lower growth rates in the latter half of the forecast period. This pattern suggests an acceleration in the global economy gravitating toward emerging markets, with India positioned to be a primary driver of global growth.

Inflation overview

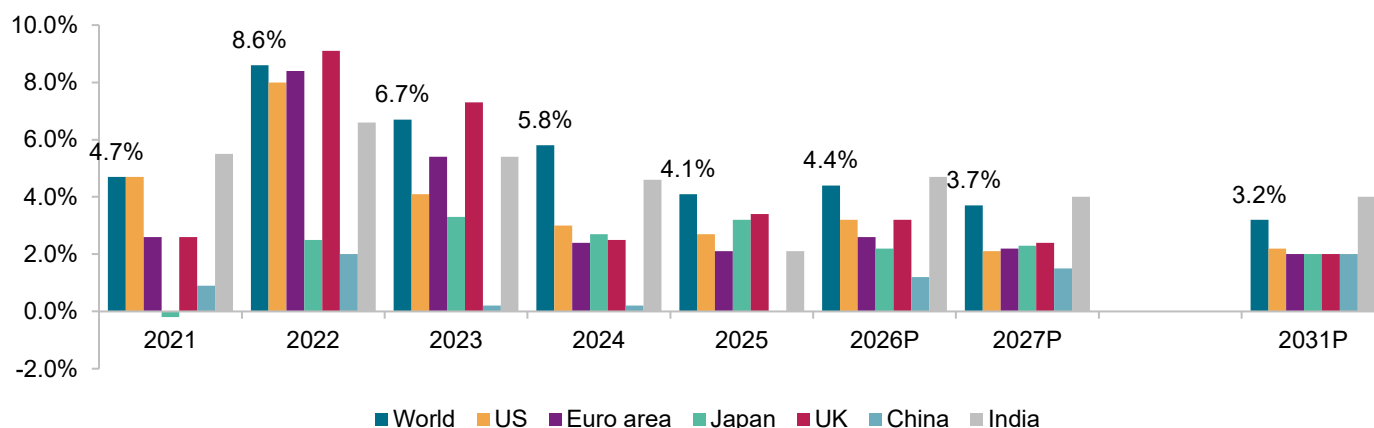
Global consumer price inflation jumped to 8.6% in 2022 from 3-5% between 2020 and 2021 because of a sharp increase in the prices of oil, natural gas, fertilisers and other commodities in the wake of geopolitical conflicts. Supply chain disruption

exacerbated the situation. However, in 2023, global inflation slowed to 6.7% because of the resolution of supply-side issues in certain industries. It eased further to 5.8% in 2024 and 4.1% in 2025.

Five-year historical data and growth forecast

The IMF projects global inflation to rise to 4.4% in 2026, driven by increasing energy prices and increased geopolitical uncertainties. The anticipated expansion in inflation is attributed to a broad-based increase in global core inflation and a fading pass-through effect from previous price easing. The decline in global inflation in 2024 and 2025 reflects a broad-based decrease in core inflation, unlike the situation in 2023, when headline inflation fell mainly due to lower fuel prices.

Inflation review and outlook



P - projected

Note: Calendar year, except India, which is fiscal year

Source: Crisil Intelligence, IMF, World Bank, S&P Global

Consumer prices (on-year growth)	2021	2022	2023	2024	2025	2026P	2027P	2031P
World	4.70%	8.60%	6.70%	5.80%	4.1%	4.4%	3.7%	3.20%
US	4.70%	8.00%	4.10%	3.00%	2.70%	3.20%	2.10%	2.20%
Euro area	2.60%	8.40%	5.40%	2.40%	2.10%	2.60%	2.20%	2.00%
Japan	-0.20%	2.50%	3.30%	2.70%	3.20%	2.20%	2.30%	2.00%
UK	2.60%	9.10%	7.30%	2.50%	3.40%	3.20%	2.40%	2.00%
China	0.90%	2.00%	0.20%	0.20%	0.00%	1.20%	1.50%	2.00%
India	5.50%	6.60%	5.40%	4.60%	2.10%	4.70%	4.00%	4.00%
Emerging and developing Asia	2.30%	3.90%	2.30%	1.90%	1.10%	2.60%	2.50%	2.80%

P - projected

Note: Calendar year, except India, which is fiscal year

Source: Crisil Intelligence, IMF and industry

The inflationary trends in major economies are detailed below.

US

The consumer price inflation eased to 2.7% in 2025 from 8% in 2022 and is expected to rise to 3.2% in 2026 considering higher energy prices. The on-year increase in consumer prices is projected to remain 2.1-2.2% till 2031. The continuous fall in inflation from the high of 2022 reflects weakening economic growth and easing supply-side pressures.

Euro area

Consumer price inflation in the Euro area increased significantly from 2.6% in 2021 to 8.4% in 2022, driven by elevated energy prices and supply-side disruptions, before easing to 5.4% in 2023. It further moderated to 2.4% in 2024 and 2.1% in 2025. Inflation is projected to rise to 2.6% during 2026, before gradually stabilising at around 2.0% by 2031, indicating a return to more stable price levels.

Japan

Inflation in Japan, which has traditionally remained below 1%, jumped to 2.5% in 2022 and 3.3% in 2023 due to a sharp increase in food prices and expensive imports because of weakening of yen. In 2026 Going forward, inflation is expected to ease a bit but remain at 2-2.3% over the next 5 years due to expectations of wage increments and depreciated yen.

UK

The UK's inflation surged sharply to 9.1% in 2022, before easing to 7.3% in 2023 and further to 2.5% in 2024, reflecting the impact of monetary tightening and stabilising energy and supply conditions. The expected gradual decline to 2% by 2031 indicates a steady return to pre-pandemic levels, although some persistence in inflationary pressures may remain in the medium term.

China

Consumer price inflation eased to 0.9% in 2021 from 2.5% in 2020 due to the government's effective action to bolster production of daily necessities and smoothen the sharp fluctuation in commodity prices. In 2022, however, inflation increased to 2% because of increase in pork prices. In 2025, inflation slipped to 0% owing to weak domestic demand in the wake of a higher unemployment rate, slower income growth and the real estate market downturn. Inflation is expected to rise to 2% in medium to long term to reach near-optimum levels as demand normalizes and policy support gains traction.

India

India's inflation measured by the Consumer Price Index (CPI) fluctuated between 6.2% in 2020 and 5.5% in 2021. It rose sharply in 2022 (6.6%), primarily due to global supply chain disruptions, pandemic-induced uncertainties and surging commodity prices. However, after 2023, inflation began to decline steadily and reached 5.4% in 2023 and bottomed at 2.1% in 2025. It is projected to stabilise at 4% by 2031. This decline reflects India's improved fiscal policies, structural reforms and effective monetary measures by the Reserve Bank of India (RBI). Stabilisation is also attributed to easing global uncertainties and better management of supply chain dynamics. Inflation is projected to rise 4.7% in 2026 on account of the impact of the Middle East conflict.

Emerging and developing Asia

Inflation in emerging and developing Asia is projected to rise at 2.6% in 2026 due to the conflict in the Middle East. Higher energy prices and food prices expectations have played a significant role in shaping inflation trends. The inflation outlook is expected to stabilise at 2.8% by 2031.

Global trade flow

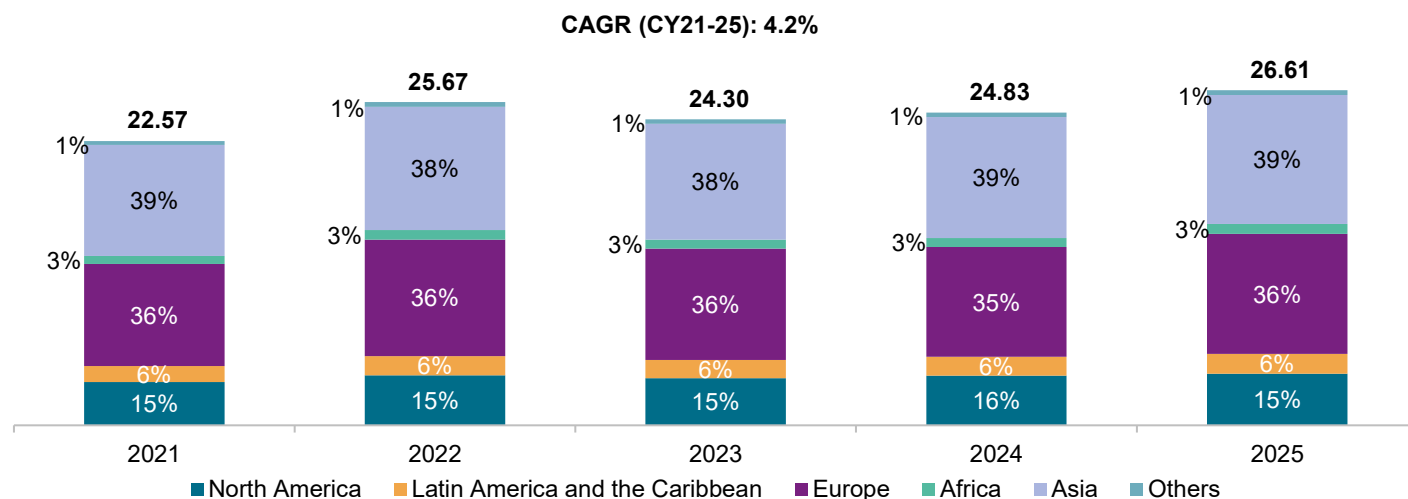
Five-year historical data

Global trade flow⁵ clocked a compound annual growth rate (CAGR) of ~4.2% during 2021-2025 to reach \$26.61 trillion from \$22.57 trillion. In 2021, it surged on the back of the resolution of supply-side issues, resumption of industrial and economic activities, and the post-pandemic demand recovery. The growth momentum spilled over to 2022, when global trade grew ~14% on-year to \$25.67 trillion. In 2023, however, the trade declined around 6% on-year to \$24.30 trillion owing to a

⁵ Global trade flow implies the greater of global merchandise import and global merchandise export in \$ value

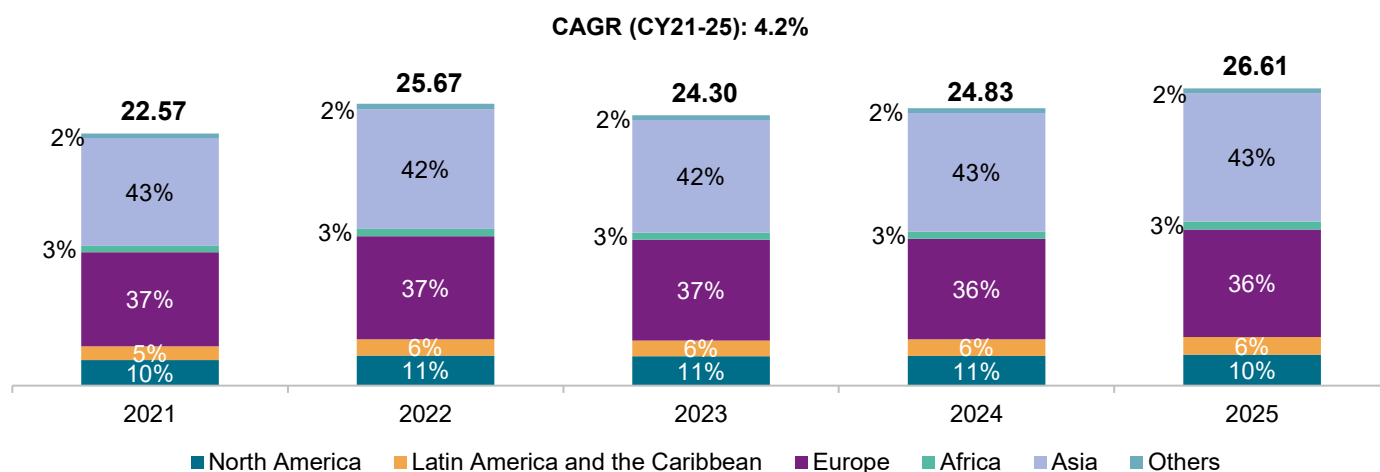
decrease in exports from developing countries and deepening geopolitical uncertainties. In 2024 and 2025, global trade expanded 2.2% to \$24.83 trillion and 7.2% to \$26.61 trillion, respectively.

Global import volume (\$ trillion) and share by regions



Source: Crisil Intelligence, industry, UN Trade and Development (UNCTAD)

Global export volume (\$ trillion) and share by regions



Source: Crisil Intelligence, industry, UNCTAD

Trade flow (\$ trillion)	Region	2021	2022	2023	2024	2025
Import	Northern America	3.44	3.96	3.74	3.93	4.09
	Latin America and the Caribbean	1.27	1.54	1.46	1.50	1.59
	Europe	8.11	9.25	8.83	8.71	9.51
	Africa	0.62	0.74	0.72	0.72	0.79
	Asia	8.81	9.80	9.20	9.60	10.25
	Others	0.33	0.38	0.36	0.36	0.38
Export	Northern America	2.26	2.67	2.59	2.63	2.74

Latin America and the Caribbean	1.21	1.42	1.40	1.46	1.55
Europe	8.31	9.11	8.91	8.89	9.51
Africa	0.56	0.66	0.62	0.63	0.69
Asia	9.54	10.58	9.96	10.49	11.36
Others	0.40	0.48	0.43	0.40	0.40

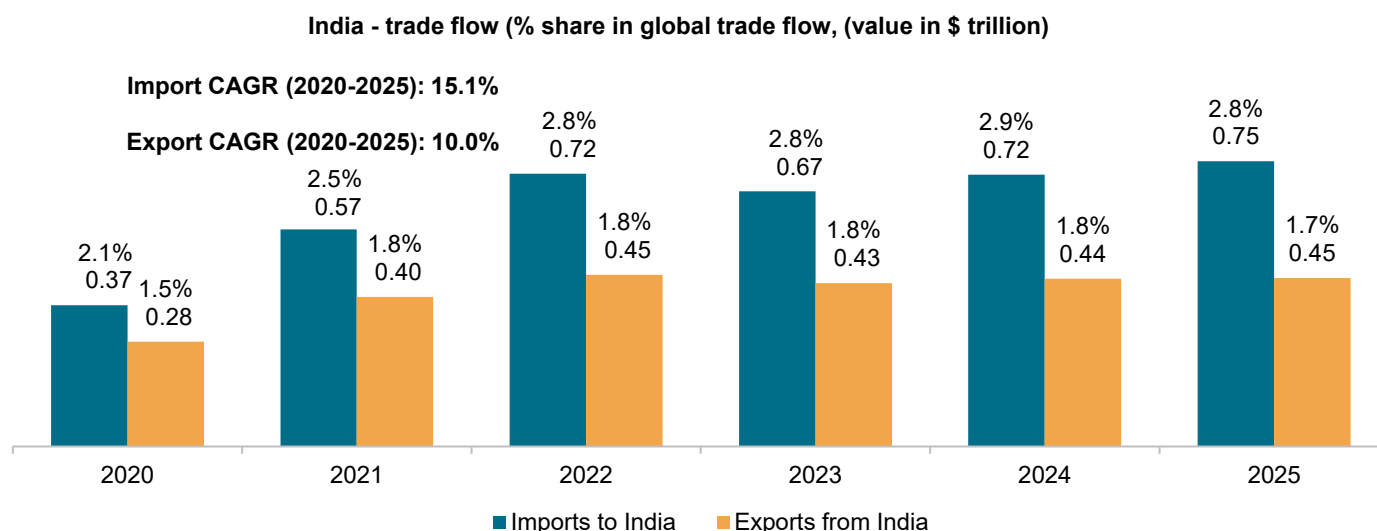
Source: Crisil Intelligence, industry, UNCTAD

Despite the drastic on-year changes in global trade flow, the percentage share of the major regions remained consistent during the period 2021 to 2025. For instance, Asia, Europe and North America have had a share of 38-39%, 36-37% and 15-16%, respectively, of the global imports. On the export front, these regions account for 41-43%, 37-38% and 10-11%, respectively, of the exported merchandise in values terms.

In 2025, Asia had the highest value of merchandise trade among the represented regions—\$11.36 trillion in exports and \$10.25 trillion in imports. Europe came second—\$9.51 trillion in exports and imports.

India's position in global trade

India's merchandise imports and exports clocked CAGR of 15.1% and 10.0%, respectively, between calendar year 2020 and 2025, higher than the global 8.3% for the same period. This underlined an improvement in India's performance. For instance, the share of imports from India increased to 2.8% in 2025 from 2.1% in 2020 and the share of exports increased to 1.7% from 1.5%.



Source: Crisil Intelligence, industry, UNCTAD

In 2021, the gradual reopening after lockdowns led to a strong on-year increase of 54% in imports. With the resumption of economic activities, domestic manufacturers turned their attention to increasing production for domestic and export sales, which led to a 43% on-year increase in exports in 2021. In 2022, the trade flow was fuelled by the release of the post-pandemic pent-up demand and the gradual resolution of supply chain disruptions across multiple industries. This led to imports and exports rising 26% and 15% on-year, respectively.

In CY 2023, imports and exports fell 7% and 5%, respectively. The decline in imports was because global commodity prices fell from the highs of the previous year. Exports were hit due to geopolitical uncertainties and the Indian government's export curbs on agriculture produce to limit domestic inflation. CY2024 and CY2025 witnessed higher import growth at 7.5% and 4.2% respectively while exports grew at around 2.3% in CY2024 and CY2025.

India has been a net importer of goods. However, the government is focused on turning the country into a global manufacturing hub. It has unveiled various schemes such as Make in India, Atmanirbhar Bharat and production linked incentives, among others, to help India narrow its trade deficit and become a net exporter. On top of this, the focus of global manufacturers to derisk and diversify supply chains is also expected to help India become a major manufacturer and exporter.

Global supply chain derisking strategy

Overview

In the 1990s and early 2000s, China emerged as a leading global manufacturing hub due to its large, low-cost labour force, favourable government policies and substantial infrastructure investments. However, in the mid-to-late 2010s, the country began losing some of its competitive advantage as global companies increasingly focused on mitigating supply chain concentration risks.

This shift encouraged global companies to diversify their supply chain and manufacturing beyond China. Although the strategy gained attention in the early 2010s, it became a major focus in 2018, when these companies began actively reducing their dependence on China by expanding manufacturing operations to alternative production bases.

Following were the early drivers of the strategy:

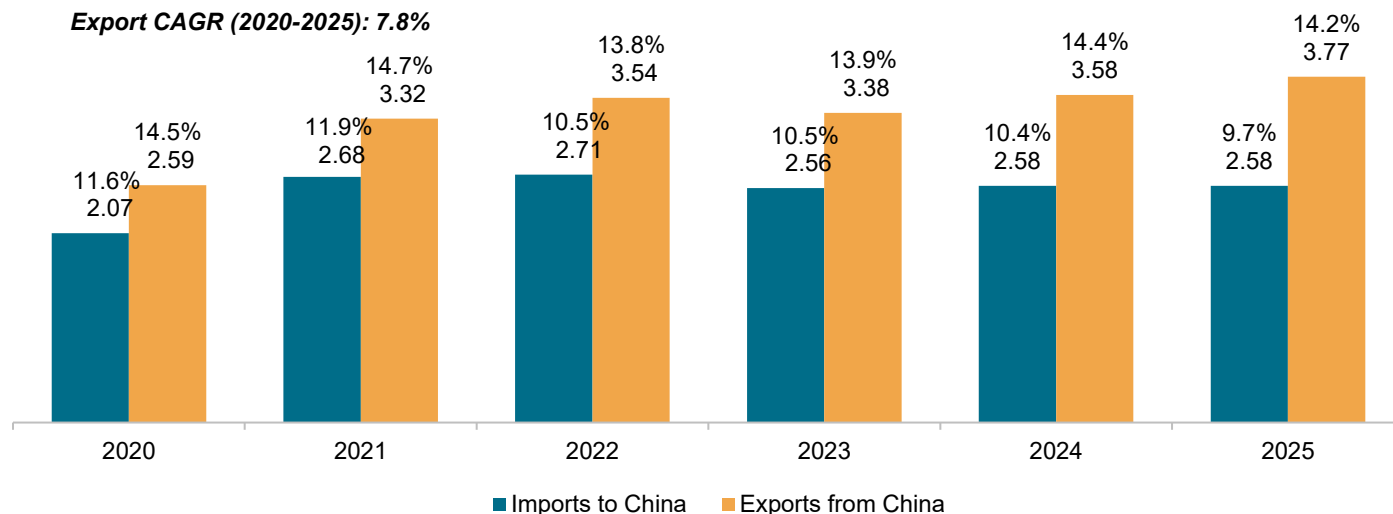
1. **Rising labour costs in China:** As the Chinese economy developed rapidly, wages also increased significantly, eroding the country's cost advantage, particularly in labour-intensive industries. For instance, in 2025, the minimum wage in China, was Rs 25,000–39,000 per month, compared with Rs 5,000-5,500 per month in India. This widening wage gap prompted global companies to diversify their manufacturing operations to other countries such as India and Vietnam, which offered favourable business environments at lower costs.
2. **Geopolitical and regulatory uncertainties:** Geopolitical developments, particularly the US-China trade war that began in 2018, resulted in tariffs and trade barriers that reduced the competitiveness of Chinese exports. In addition, regulatory challenges such as stringent environmental regulations and bureaucratic hurdles increased the complexity and cost of operations in China. For example, foreign companies were often required to share proprietary information with local partners as a condition for market access. Such unpredictable policy-related barriers prompted many companies to explore alternative manufacturing locations to reduce tariff impact, maintain cost-competitiveness and improve geographical diversification.
3. **Covid-19 pandemic:** The pandemic, which began in late 2019 and early 2020, exposed the risks associated with excessive dependence on a single manufacturing hub. As the initial epicentre of the pandemic, China imposed lockdowns that led to factory closures and significant disruptions to global supply chains. Consequently, many companies faced difficulties sourcing raw materials and finished goods, highlighting the risk of over-dependence on the region and accelerating efforts to diversify to avoid or mitigate such disruptions in the future.
4. **Economic development and proactive approach of other countries:** Many countries, particularly in south and southeast Asia, including India, positioned themselves as alternative manufacturing locations by investing in infrastructure, simplifying regulations, improving the ease of doing business and offering incentives to attract foreign direct investment (FDI).

Key beneficiaries of supply chain derisking strategy

China - trade flow (% share in global trade flow, value in \$ trillion)

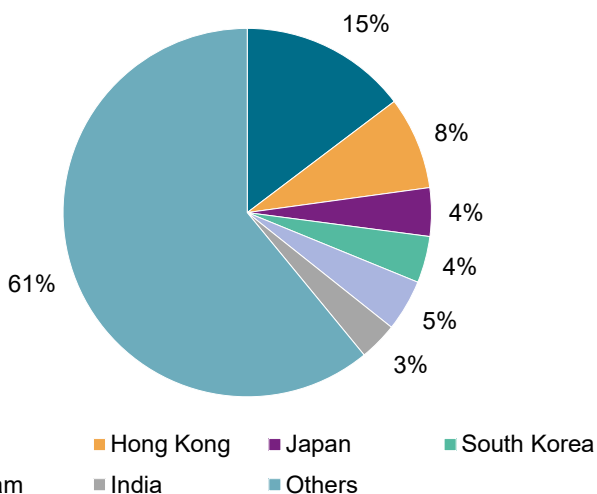
Import CAGR (2020-2025): 4.6%

Export CAGR (2020-2025): 7.8%

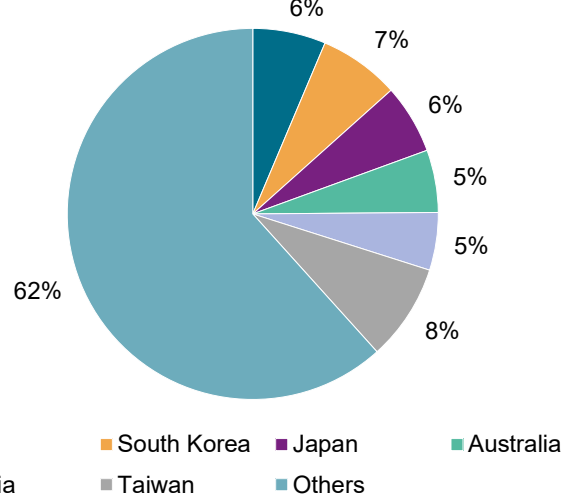


Source: Crisil Intelligence, industry, UNCTAD

Split of merchandise exported from China in 2024 (100% = 3.58 \$ trillion)



Split of merchandise imported to China in 2024 (100% = 2.58 \$ trillion)



Note: The data for merchandise trade split for China is available till calendar year 2024

Source: Crisil Intelligence, industry, UNCTAD

Between 2020 and 2025, China's merchandise imports (in value terms) logged a CAGR of 4.6% and merchandise exports (in value terms) clocked a CAGR of 7.8%. During the same period, the overall share of exports from China in global trade flow remained stable at 14.2% in 2025 from 14.5% in 2020. However, this share declined to 13.9% in 2023 from a peak of 14.7% in calendar year 2021, suggesting that after 2021, China's exports may have been impacted (in value terms) by the supply chain derisking strategy adopted by many countries.

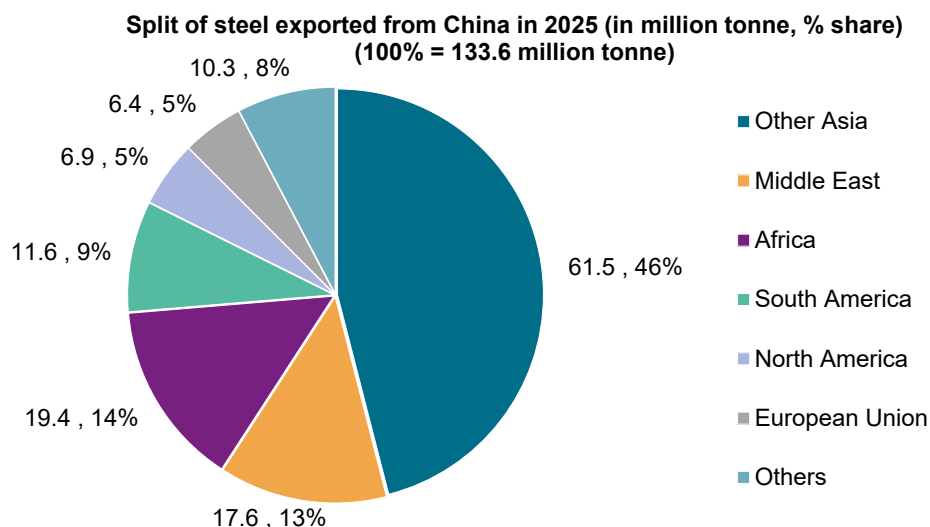
In 2024, the US accounted for 15% of China's merchandise exports, making it China's largest export market (in value terms), followed by Hong Kong (8%) and Japan (4%). On the imports side, Taiwan (8%) emerged as China's single-largest merchandise supplier,, followed by South Korea, US and Japan, each accounting for 6-7%.

However, the supply chain derisking strategy is expected to continue to benefit the south or southeast Asian economies, such as India, Vietnam, Thailand, Indonesia, etc. due to the following factors:

- Geographical proximity to China:** This factor is particularly crucial for companies looking to maintain a presence in China while diversifying to other countries.
- Cost competitiveness:** These countries offer cost advantages to companies looking to diversify their operations. Low labour and real estate costs, compared with many other regions make them strong contenders to become manufacturing hubs for global companies. For example, average real estate costs in China are 2-3 times higher than those in India. Similarly, China's minimum wage is estimated to be 5-6 times higher than that of India.
- Favourable government policies:** Governments across these economies have taken steps to improve business environments by reducing regulatory and bureaucratic hurdles. In addition, they are investing heavily in infrastructure to provide sustainable solutions to meet the evolving business requirements.
- Political, economic and demographic advantages:** These countries possess a large and relatively young workforce, ensuring the availability of both skilled and unskilled labour at competitive costs. Furthermore, proactive policies towards becoming manufacturing hubs and potential economic development opportunities will pave the way for these companies to become beneficiaries of the diversification strategy.

Indian steel industry—a key potential beneficiary of the de-risking strategy

According to the World Steel Association, China's steel exports reached 133.6 million tonne in 2025. Other Asian countries accounted for ~46% of China's total steel exports in volume terms, followed by the Middle East and Africa (accounting for 12-14% each), highlighting the growing demand for Chinese steel in these regions.



Source: World Steel Association, Crisil Intelligence, industry

India's manufacturing sector is well positioned to benefit from the strategic shift by multinational companies to diversify their manufacturing bases beyond China. The manufacturing industry in steel and related products is expected to be a key beneficiary, supported by favourable supply and demand-side business environment, government policy initiatives and other factors as detailed below:

Government initiatives and policy support

- a) The government introduced the Production-Linked Incentive (PLI) scheme under which various incentives are provided to promote the production of specialty steel and support key end-use industries such as electronics and automobiles. Under the scheme, an incentive outlay of Rs 1.97 trillion (equivalent to over \$26 billion) has been allocated across 14 key sectors to enhance the country's manufacturing capabilities and boost exports. The scheme is expected to benefit several domestic sectors while also increasing local demand for steel, particularly stainless steel. For example, automobile companies are increasingly focusing on vehicle weight reduction by substituting conventional materials with advanced grades of steel, including stainless steel. As a result, demand for stainless steel is expected to increase, benefiting the domestic steel industry
- b) Further, in 2017, the government introduced the National Steel Policy (NSP) with an aim to increase India's steel production to 300 million tonne by 2030 from around 215 million tonne in fiscal 2026. To achieve this target, the government is expected to provide incentives to foreign steel manufacturers to establish production facilities in India.

In addition, The Government of Maharashtra's Package Scheme of Incentives (PSI), 2019 supports industrial growth by encouraging new investments, expansion and diversification across the state. The scheme classifies regions into categories such as Group A, B, C, D, D+, No Industry Districts, Aspirational Districts and Naxalism Affected Areas, with higher incentives offered in less-developed regions to promote balanced industrialisation.

For the stainless steel industry, PSI-2019 is particularly relevant as the sector is highly capital- and power-intensive, requiring significant investment in land, plant and machinery, rolling and processing facilities, utilities, quality systems and technology upgrades. The scheme helps reduce both upfront and operating costs through incentives such as Industrial Promotion Subsidy, stamp duty exemption, electricity duty exemption, interest subsidy and power tariff subsidy. Eligible MSMEs can receive incentives linked to 30% to 100% of fixed capital investment, depending on the project location, while Large Scale and Special LSI units can also access substantial incentive support, including up to 100% of eligible fixed capital investment in priority regions. The Industrial Promotion Subsidy, linked to SGST on eligible sales within Maharashtra, improves cash flows and enhances project viability for stainless steel manufacturers.

PSI-2019 also supports existing stainless steel units undertaking capacity expansion, product diversification or downstream value-added manufacturing, with qualifying expansion projects eligible for incentives equivalent to 80% of those available to new units. This encourages investment in advanced processing, finishing and higher-value stainless steel products.

- c) **Growing export opportunities:** The Indian government has been implementing various policies, including the PLI scheme, Make-in-India scheme, Free Trade Agreements, Trade Infrastructure for Export Scheme, Market Access Initiative (MAI) Scheme, schemes for improvement in ease of doing business in the country, as well as FDI reforms to strengthen the country's manufacturing capabilities and boost export of steel and value-added products. For example, as of September 2025, the participating companies in the first two rounds of PLI for speciality steel (PLI 1 and 1.1) had invested Rs 22,973 crore and generated employment for 13,284 people. In addition, under the MAI, which is an export promotion scheme envisaged to act as a catalyst to promote India's export on a sustained basis, a yearly budget of ~Rs 2 billion has been earmarked and is expected to increase further in the coming years

Furthermore, efforts by several countries to reduce their dependence on Chinese steel is creating opportunities for Indian steel manufacturers to cater to their requirements. Moreover, the Indian stainless steel industry is focussing on sustainable and environmentally friendly products, which are expected to drive export demand in the coming years

- d) **Growing demand from key industries:** Sectors such as building and construction, consumer durables, infrastructure and automobiles are major consumers of steel. As global automobile companies increasingly diversify their production bases beyond China, demand for steel from alternative manufacturing destinations is expected to rise. As the world's second-largest steel producer after China, India is well positioned to benefit from this shift.

In its efforts to become an attractive business destination for global companies, India has been investing heavily in infrastructure development. This way, the domestic steel industry will benefit from the ongoing infrastructure development in the country. Similarly, the stainless steel industry is expected to witness significant expansion, supported by demand growth and favourable material substitution trends towards stainless steel in several end-use industries

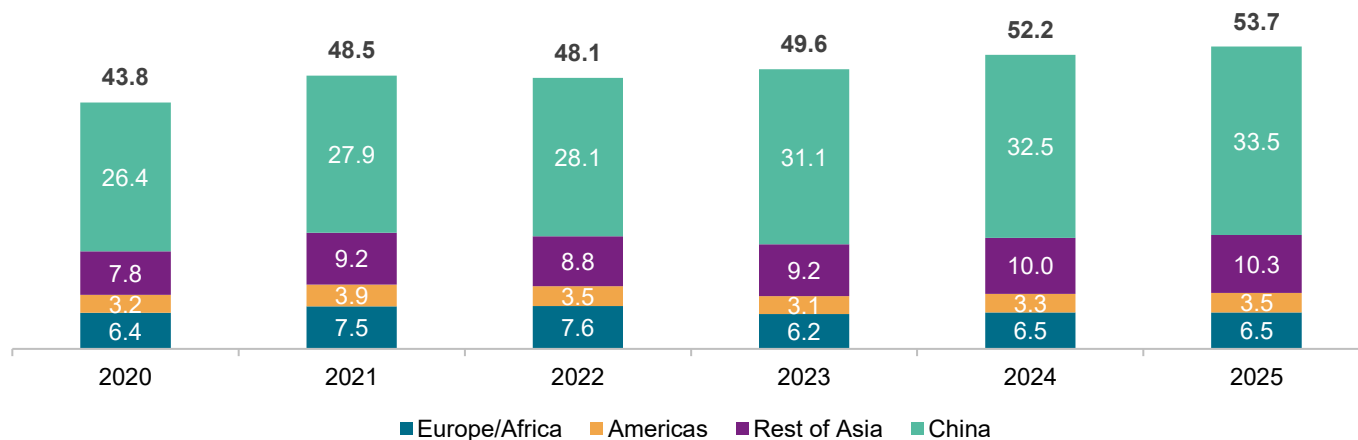
- e) **Raw material availability:** India possesses substantial reserves of iron ore and coal, the two key raw materials used in steel production. According to the Indian Bureau of Mines, the country's total resources of haematite (Fe_2O_3) and magnetite (Fe_3O_4) iron ore are over 35.29 billion tonne, making India one of the world's leading producers of iron ore. In addition, the Ministry of Coal estimates that India's coal reserves stood at 400.72 billion tonne in as on April 2025. The abundant availability of these resources provides a secure and reliable raw material base, making India an attractive destination for steel manufacturers seeking to diversify beyond China.
- f) **Existing expertise in India:** India, is the second-largest producer of crude steel in the world (with a production volume of 169.23 million tonne in fiscal 2026, as reported by the Joint Plant Committee), making it a natural choice for companies looking to diversify their supply chains away from China. India is home to key integrated steel producers such as Steel Authority of India, JSW Limited, Tata Steel Limited, which provides it a strong competitive edge in skilled workforce and technology compared with other countries.

Global stainless steel industry overview

Demand

Global demand for stainless steel increased to 53.7 million tonne in 2025 from 43.8 million tonne in 2020, clocking a 4.2% CAGR during the period, supported by sustained growth across key end-use industries.

Global stainless steel melt demand in million tonne (region-wise split)



Particulars	Europe and Africa	Americas	Rest of Asia	China
CAGR (%) 2020-2025	0.3%	1.5%	5.8%	4.8%
Share in global demand (2020)	15%	7%	18%	60%
Share in global demand (2025)	12%	6%	19%	62%

P – projected

Source: Crisil Intelligence, worldstainless.org

China has consistently been the largest consumer of stainless steel, accounting for 57-63% of the global consumption over the past 4-5 years. Its share in the global stainless-steel demand increased ~2 percentage points between 2020 and 2025, driven by demand growth at a CAGR of ~4.8% during the period. However, China's share of global demand declined between 2020 and 2022 due to pandemic-linked lockdowns, which disrupted supply chains and led to temporary shutdowns across several manufacturing industries. These disruptions resulted in higher raw material prices and procurement delays. During this period, demand from the rest of Asia, Europe and Africa increased. With the resumption of economic activity in 2023, China logged a strong recovery in stainless-steel demand and regained its leadership position.

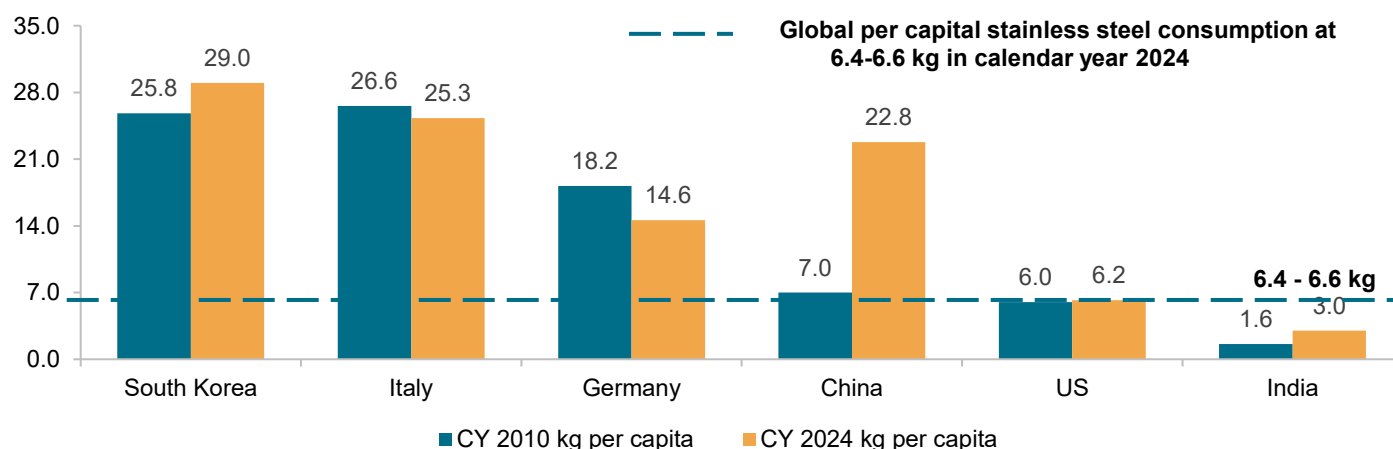
In contrast, the Americas and much of Europe witnessed a decline in global share of stainless demand between 2020 and 2025. The share of Americas and Europe fell from 7% and 15%, respectively, in 2020, to 6% and 12%, respectively, in 2025. This decline was owing to a slowdown in key end-use industries such as automobile and building and construction.

Growth in these regions is expected to be supported by rising demand from industrial, infrastructure, consumer durables and automotive applications. In addition, the gradual substitution of conventional steel with stainless steel across various end-use applications is expected to further support demand growth.

Particularly, the focus of these regions on developing renewable energy capacities in the form of wind farms and solar parks, is expected to be the key driver for sustainable and corrosion-resistant stainless steel demand in storage systems and other related equipment. Furthermore, in a bid to reduce weights of vehicles (particularly electric vehicles), automobile companies are expected to accelerate the substitution of conventional steel with stainless steel. Apart from these factors, the demand for stainless steel in the US will also be driven by an expected increase in investments in the aerospace and defence segments. Similarly, demand for stainless steel products in Canada will also be supported by a booming construction industry as the country makes strides towards urbanisation and green building practices. Initiatives such as 'smart cities' in Europe are expected to drive construction- and infrastructure-related renovation activities in the region, thereby generating additional demand for stainless steel.

Despite expectations of flat or declining growth in stainless steel demand in developed economies, global stainless steel demand is expected to grow at 3-4% CAGR between 2025 and 2030 to 62-65 million tonne. Much of the push to growth is likely to emanate from Asian countries, particularly India and China, where per capita disposable income and focus on infrastructure development and manufacturing are increasing.

Per capita stainless steel consumption (kg)



Note: Kg per capita stainless steel consumption as a metric represents the average amount of stainless steel used per person in a given country

Source: Crisil Intelligence, industry, worldstainless.org.

Global per capita stainless steel consumption was 6.4-6.6 kg in 2024. Over 2010 to 2024, per capita consumption in China and India rose 225% and 87.5%, touching 22.8 kg and 3.0 kg, respectively. On the other hand, consumption in Germany and Italy declined a tad—to 14.6 kg in 2024 from 18.2 kg in 2010 in Germany and to 25.3 kg from 26.6 kg in Italy.

India's and China's performance can be attributed to growing industrialisation and fast-paced infrastructure development. While the growth is more profound in China, India also shows strong potential.

South Korea's per capital consumption rose 12.4% between 2010 and 2024, primarily on the account of its focus on manufacturing of high-tech stainless-steel products. Consumption declined 10% in Japan and remained rangebound in the US, increasing 3.3% during the past 14-year period, owing to economic slowdown and increasing interest rates.

The declining trend in developed economies can be attributed to a shift in their strategic focus from being manufacturing-based economies to being service-based economies. Developing economies such as China and India have been focusing on turning into global manufacturing hubs, which is driving their stainless-steel demand.

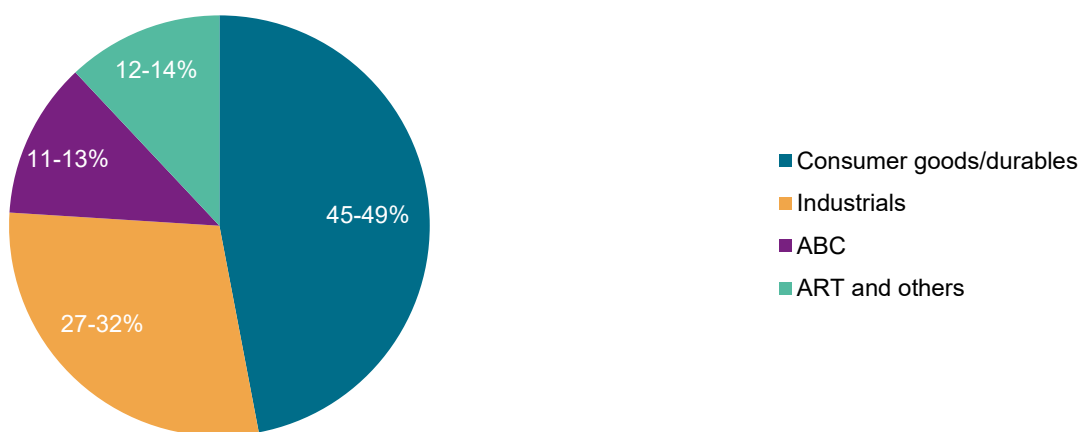
The Indian stainless steel industry is on the cusp of significant growth, driven by the country's relatively low per capita consumption of stainless steel. This is substantially below the global average of 6.4-6.6 kg and trails South Korea per capita consumption of 29.0 kg.

The considerable gap between India's current consumption levels (despite its status as one of the world's fastest-growing major economies) and those of developed nations presents a substantial growth opportunity for the industry, underscoring its immense potential for expansion.

According to predictions by the Indian Stainless Steel Development Association (ISSDA), per capita consumption is expected to rise to 4.5-5.5 kg by fiscal 2030, driven by increasing industrialisation, infrastructure development and manufacturing focus. As India continues to emerge as a global manufacturing hub, the demand for stainless steel is anticipated to surge, driven by its widespread applications in construction, automotive and consumer durables.

With a notable 87.5% growth rate in per capita consumption between 2010 and 2024, India is poised to become a significant player in the global stainless-steel market, offering attractive opportunities for investment, employment and economic growth. The industry's growth prospects are further bolstered by the government's initiatives to promote manufacturing and infrastructure development, setting the stage for a significant increase in stainless steel demand in coming years.

Stainless steel end-use split by sector in CY 2025 (% share)



Source: Crisil Intelligence, Industry, worldstainless.org

ABC: Architecture, building and construction; ART: Automobile, railways, and transport

Note: ART includes motor vehicles and parts and other transport, ABC includes the construction industry, consumer durables includes electrical machinery as well as metal products and Industrials include mechanical engineering

Consumer goods/durables: This sector is a major end user of stainless steel, accounting for the largest share of global demand (45-49%). Stainless steel is consumed in the manufacture of consumer goods/durables, including kitchen essentials and cabinets of consumer durables such as refrigerators and washing machines. The sector will grow on account of urbanisation, rising disposable income and affordability among consumers, primarily in developing countries.

Industrials: Industrial applications account for 27-32% of the global stainless-steel demand, driven by its diverse applications in machinery and equipment. Stainless steel's strength, durability and resistance to corrosion and high temperatures make it essential for manufacturing industrial machinery, tools and equipment. It is used to produce components such as pumps, valves, seamless pipes and tubes, flanges, bearings and gears, which require reliability and longevity. Additionally, stainless steels hygienic properties make it indispensable in food processing, pharmaceuticals and medical device manufacturing.

Architecture, building and construction (ABC): This sector accounts for 11-13% of global stainless-steel demand. Fast-growing developing economies such as China, India and Indonesia are focusing strongly on infrastructure development. Further, developed economies such as Japan, Australia and Korea also allocate a significant portion of their annual budgets to the infrastructure segment. The rising infrastructure expenditure will increase consumption of stainless steel, which is a major commodity deployed in the infrastructural segments of seaports, airports, railway bridges, etc.

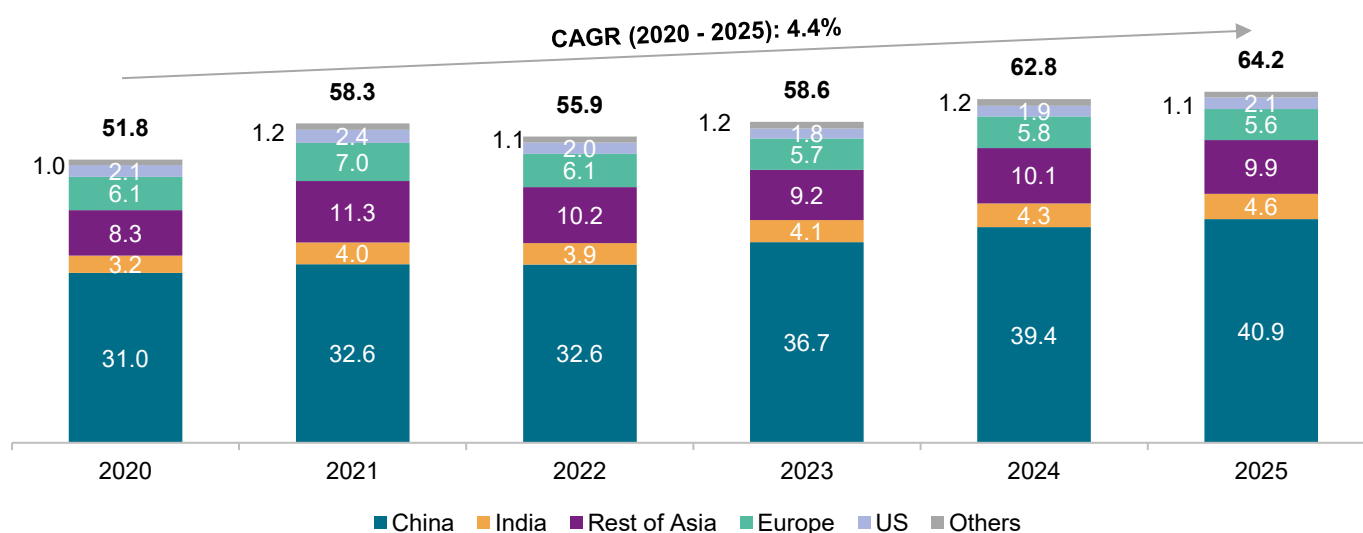
The building and construction sector across countries is also expected to boost stainless steel demand on account of its usage in roofing, furniture, etc. Owing to the lack of required infrastructure, developing countries are expected to invest more than the developed ones in the infrastructure, building and construction sectors, and will thus lead demand for stainless steel from these sectors.

Automobile, railways and transport (ART): Motor vehicles and other transports drive 12-14% of global end-use demand. Stainless steel is used in manufacturing automobile parts such as gaskets, screws, windscreen components, springs and seatbelt components. Further, with an increased focus on reducing automobile weight, stainless steel, which has a high strength-to-weight ratio, will be used extensively in future automobile variants. Aerospace relies on stainless steel for fasteners, landing gears and engine components while the railway sector uses it for railway coaches and structural components. As emerging economies grow their transport industries, the consumption of stainless steel in this sector will continue to rise.

Supply

Global stainless-steel melt production increased at 4.4% CAGR to 64.2 million tonne in 2025 from 51.8 million tonne in 2020. During this period, stainless steel production volume declined ~4% on-year in 2022 owing to supply-chain related disruptions and significant increase in energy costs led by geopolitical issues.

Global stainless steel melt production by region (million tonne)



Particulars	China	India	Rest of Asia*	Europe	US	Others*
CAGR (%) 2020- 2025	5.7%	7.9%	3.5%	-1.6%	-0.4%	1.5%
Share in global production (2020)	60%	6%	16%	12%	4%	2%
Share in global production (2025)	64%	7%	15%	9%	3%	2%

Source: Crisil Intelligence, worldstainless.org

Note: * Others includes Brazil, Russia, South Africa, and United Kingdom. Rest of Asia includes Indonesia, Japan, South Korea and Taiwan

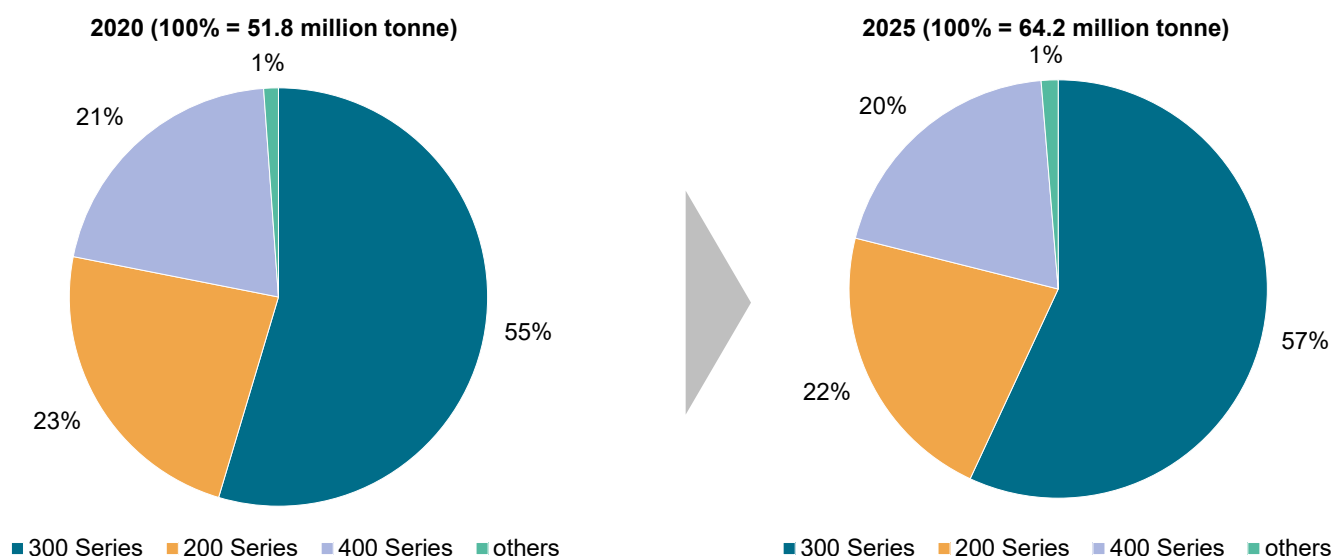
In 2021, global stainless-steel production climbed 12.7% on-year, primarily led by China, where production surged 5.1% on-year. This strong increase was owing to the resolution of supply chain issues, the lifting of its Covid-19 containment

measures, expanding industrial base and competitive production capabilities; China increased its production share to 64% in the global stainless steel production volume mix in 2025, up from its 60% share in 2020.

India is the third largest producer of stainless steel at 4.6 million tonne in CY 2025. The share of Indian production in the global volume mix has remained rangebound over the past 4-5 years and sits at ~7% as of 2025. India's consistent share is on the account of the country's consistent reliance on meeting a section of domestic requirement through imports, despite an increase in domestic demand for stainless steel.

The share of the US remained rangebound at 4% in 2020 and 3% in 2025, domestic production declining at ~0.4% CAGR over the period. The decline in the production volume was on the account of higher production costs and the impact of trade-related policies. Similarly, Europe's share declined from 12% in 2020 to 9% in 2025 at 1.6% CAGR, primarily due to stringent environmental regulations and increased labour costs. For the rest of Asia (i.e. excluding China and India), the share in global stainless-steel production declined to 16% from 15% over 2020 to 2025.

Stainless steel melt shop production by grade (% share)



Source: Crisil Intelligence, worldstainless.org

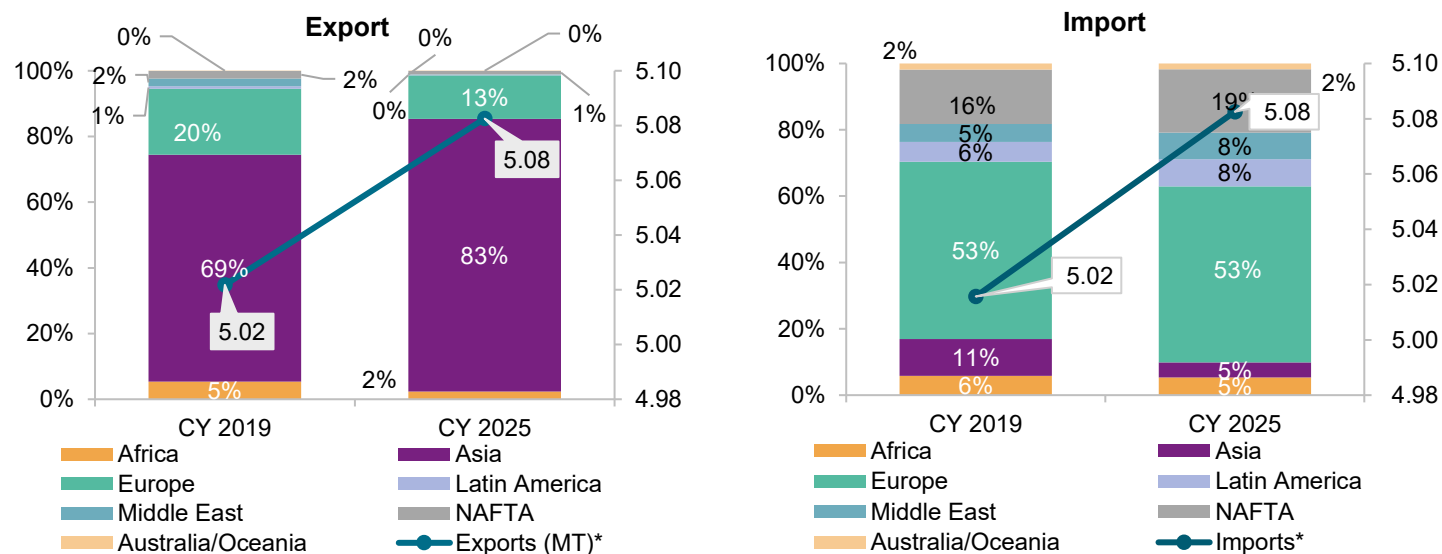
300 series: Chromium-nickel (CrNi) grade; 200 series: Chromium-manganese (CrMn) grade; 400 series: Chromium (Cr) grade

The 300 series (CrNi) grade of stainless steel has dominated the market over the past 4-5 years, with its share in stainless steel melt production increasing to ~57% in calendar year 2025 from ~55% in 2020. The steady growth indicates robust demand for this grade, which provides superior corrosion resistance and mechanical properties to finished products. The applications of 300 series grade are primarily in construction, automotive and heavy machinery.

In contrast, the market shares of the 200 (CrMn) and 400 series (Cr) grades have declined to 22% from 23% and to 20% from 21%, respectively, over the period. This decline is primarily on account of the increased focus of end-use industries towards higher quality finished products. As a result, the end-use industries that consume stainless steel for certain high-performance applications have been preferring 300 series grade over other grades.

Trade flow

Stainless steel trade trend: Calendar years 2019 and 2025 (% share, volume in million tonne)



Source: Crisil Intelligence, worldstainless.org

NAFTA: North American Free Trade Agreement regions

*Note: The export and import figures for these regions do not include any trade within the same region

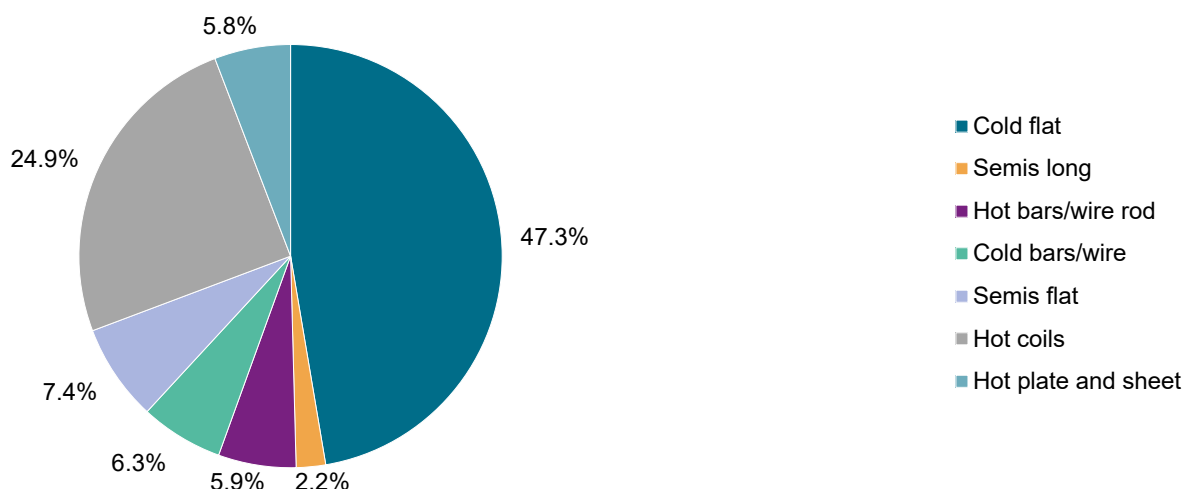
With most stainless steel exports for 2019 and 2025 from Asia, especially China, India, Korea and Indonesia, the region's share in global stainless steel exports increased from 69% in 2019 to 83% in 2025. This growth in Asia's share is on the account of increased production capacities, capacity utilisation rates, production of stainless steel at lower costs due to low labour- and real estate-related expenses and resulting economies of scale. Further, with key global consumers diversifying their supply chain, India's share in global stainless steel exports is expected to grow at a high pace amid the changing supply preferences globally. This will potentially reduce China's share in overall global exports of stainless steel.

Asia's share in global stainless-steel imports declined from 11% in 2019 to 5% in 2025 primarily due to higher domestic production capacity supported by higher focus on self-sufficiency.

Further, the low-cost stainless steel produced in Asian countries has resulted in its increased supply to Europe, Africa and NAFTA, where production volumes have decreased over time.

For instance, in the US (a NAFTA country), stainless steel production dipped from 2.6 million tonne in 2019 to 2.1 million tonne in 2025. Demand for the same remained rangebound due to sustained infrastructural and industrial development activities. Hence, the gap between demand and local supply widened, which opened an opportunity for stainless-steel exports from Asian countries to the US. Further, the constant availability of low-cost stainless steel from Asian countries proved highly competitive (in terms of prices) for locally produced stainless steel in the US, which has not allowed its domestic stainless steel industry to grow its production levels. This led to an increase in the NAFTA region's share in global stainless-steel imports from 16% in 2019 to 20% in 2025.

Global stainless-steel trade by product (% share) (2025)



Source: Crisil Intelligence, worldstainless.org

Long stainless-steel products include semis long, hot bars/wire rod, cold bar/wire; flat stainless steel products include cold flat, semis flat, hot coils, hot plates and sheet

Cold flat products led the global trade flow volume in 2024 with a 47.3% share . Stainless steel hot coils followed, with a share of 24.9%.

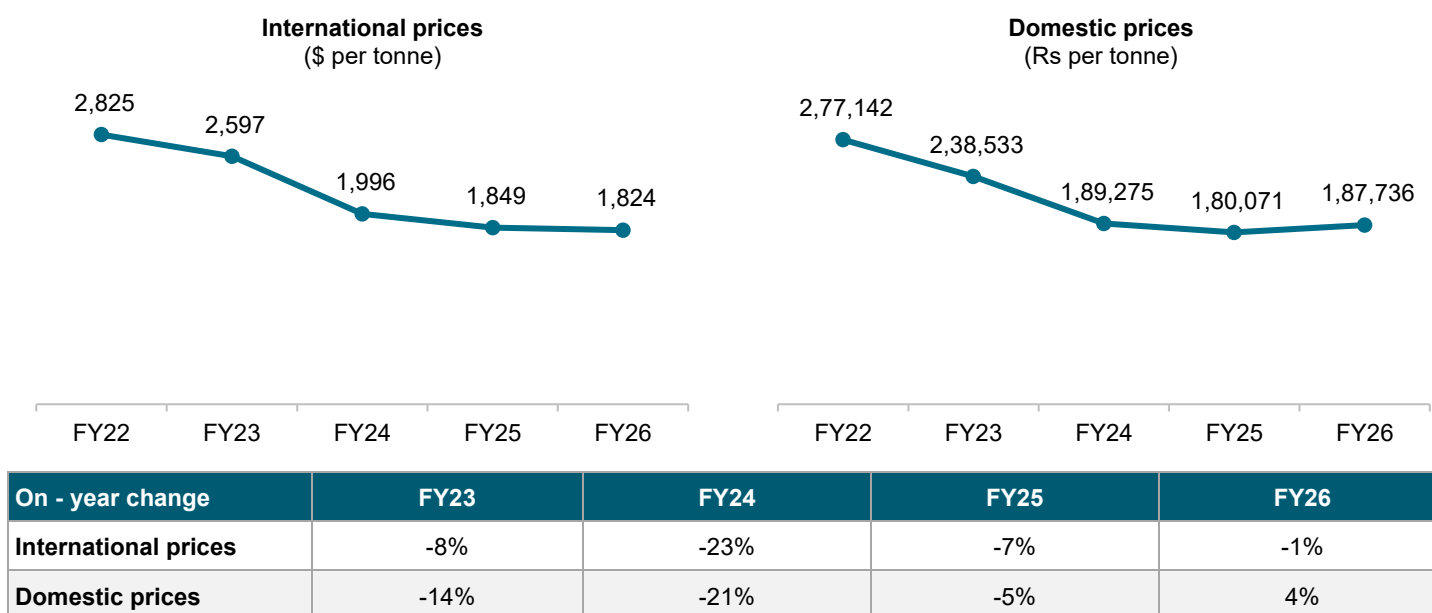
These two product forms are majorly imported around the world because of their versatility, flexibility and high demand for flat steel across architecture, building and construction, consumer goods/durables and automobiles. Further, the coil form is relatively compact, easy to transport, store and process in large quantities for downstream applications.

Going forward, the share of flat steel is expected to remain healthy due to sustained growth in demand from end-use and new-age industries. Replacement of conventional steel with stainless steel (in industries such as automobile and energy) will also drive demand for stainless steel, especially in the flat form, across the globe.

Stainless steel price trend

Global prices and domestic prices (fiscals 2022 to 2026)

The following charts describe the movement of prices of hot-rolled stainless steel of grade 304 over the past five fiscals. For drawing a comparison between international and domestic prices of the commodity, the prices correspond to the average of monthly prices between April and March of the respective fiscal in both scenarios. For instance, the price against fiscal 2022 in the charts below represents the average of prices from April 2021 to March 2022 and so on.



Source: Bloomberg, Metal bulletins, Crisil Intelligence, Industry

Both international and domestic prices followed a similar growth trend over the past five fiscals.

In fiscal 2022, the Indian steel industry recovered from supply-side issues and started production at near-optimal utilisation levels, lowering the dependence on steel imports. Though domestic stainless-steel prices increased on-year in fiscal 2022, their magnitude was lower than the on-year price increase in international prices in the fiscal.

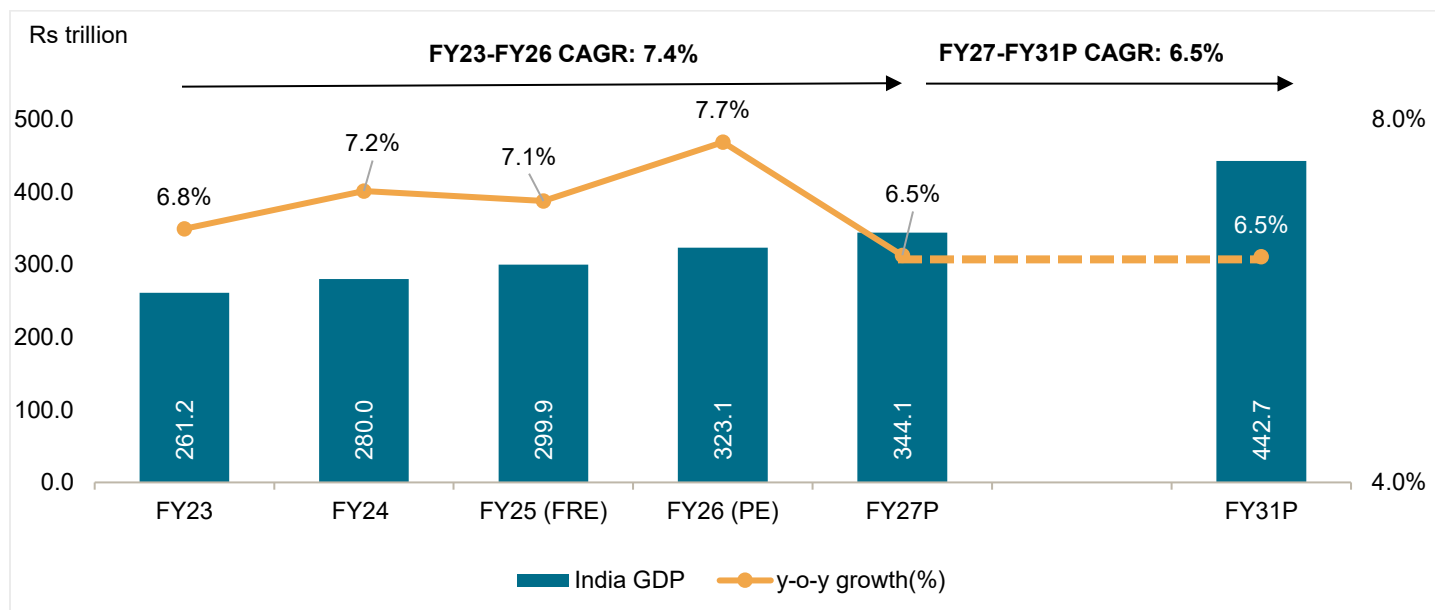
The prices, however, cooled in the next two fiscals due to resolution of supply-side issues, fall in demand in key countries of Europe and the Americas and decline in the prices of key raw materials used in steel production. A major reason for the on-year dip in stainless steel prices in fiscal 2024 domestically and internationally (21% and 23%, respectively) was the 24% on-year decline in the average London Metal Exchange (LME) prices of nickel, a key raw material. The nickel prices, fell from an average of ~\$25,600 per tonne in fiscal 2023 to ~\$19,500 per tonne in fiscal 2024, lead to a decline in stainless steel prices as well.

India's macroeconomic overview

GDP trend and composition by sectors

India's GDP grew at 7.4% CAGR between fiscals 2023 and 2026 to Rs 322.6 trillion, The post-pandemic period turned out to be positive, thanks largely to strong pent-up demand across sectors, primarily manufacturing and construction.

Real GDP trend (at constant 2022-23 prices)



Note: A new national accounts series has been released with 2022-23 as the base year, superseding the 2011-12 series, with figures available fiscal 2023 onwards

For FRE - First Revised Estimates, PE - Provisional estimates, P - Projected, FY - Fiscal year

Source: National Statistics Office (NSO), IMF's World Economic Outlook report of April 2026, Crisil Intelligence

India's real GDP is projected to grow 6.5% on-year this fiscal compared with 7.7% in the previous fiscal. Growth increased to 7.7% in fiscal 2026 driven by rise in demand. Major contributors to GDP such as construction, manufacturing, services, trade and hotels, and financial services and real estate are also likely to grow at a slower pace.

On-year demand-side real GDP growth (%)

At constant 2022-23 prices	FY24	FY25 (FRE)	FY26 (PE)
Private consumption	5.8%	5.8%	7.7%
Government consumption	0.6%	6.5%	5.5%
Gross fixed capital formation	7.3%	6.4%	8.2%
Exports	0.7%	6.6%	6.3%
Imports	-1.0%	5.3%	5.6%

Note: A new national accounts series has been released with 2022-23 as the base year, superseding the 2011-12 series, with figures available FY23 onwards

Source: Crisil Intelligence, CSO

FRE - First Revised Estimates, PE - Provisional Estimates; FY - Fiscal year

India's economic growth in fiscal 2026 was largely driven by domestic demand. Government initiatives, such as Make in India and Atmanirbhar Bharat have supported private sector investments in both traditional and new-age sectors.

Investment growth has strengthened with an increase in government capital expenditure (capex) and private investments. Gross fixed capital formation (GFCF) increased 8.2% on-year in fiscal 2026 from 6.4% in the previous fiscal. Consumption received a boost with government consumption expenditure increased 5.5% on-year and private consumption expenditure expected to have risen 7.7% from 5.8% in the previous fiscal.

On-year supply-side gross value added by economic activity

At constant 2022-23 prices	FY24	FY25 (FRE)	FY26 (PE)
Agriculture and allied	2.6%	4.2%	3.0%
Industry*	6.8%	6.8%	3.3%
Manufacturing	12.7%	9.3%	10.7%
Construction	9.9%	7.3%	7.4%
Services^	7.0%	7.9%	9.3%

FRE – First Revised Estimates, PE – Provisional Estimates

* Industry includes mining and quarrying, electricity, gas, water supply and other utilities

^ Services related to trade, hotels, transport, communication, broadcasting, finance, real estate, public administration, defence and professional and others

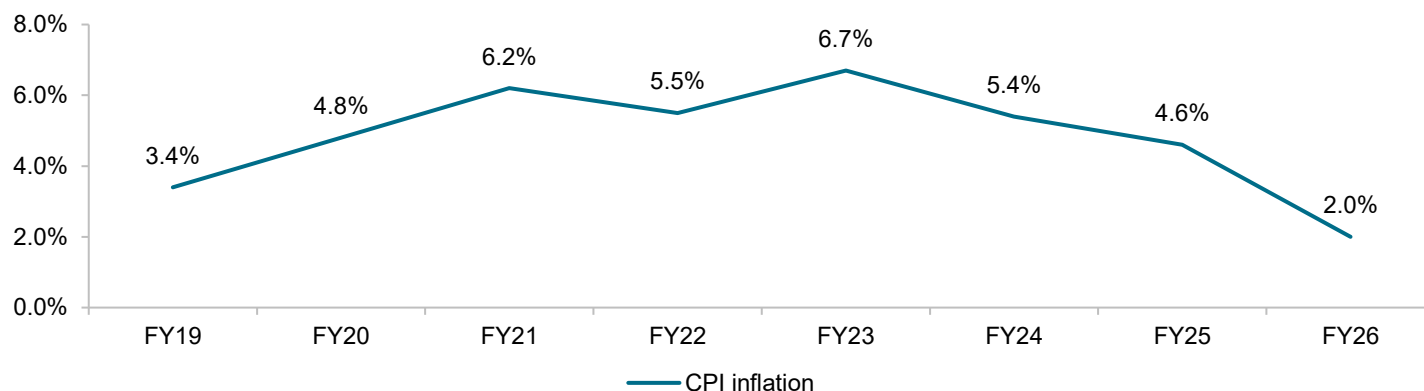
Note: A new national accounts series has been released with 2022-23 as the base year, superseding the 2011-12 series, with figures available fiscal 2023 onwards Source: Crisil Intelligence, CSO

On the supply side, GDP grew, driven by strong expansion in the construction, manufacturing and services sectors, which benefitted from robust private capital investments.

Performance of key macroeconomic indicators

Retail inflation

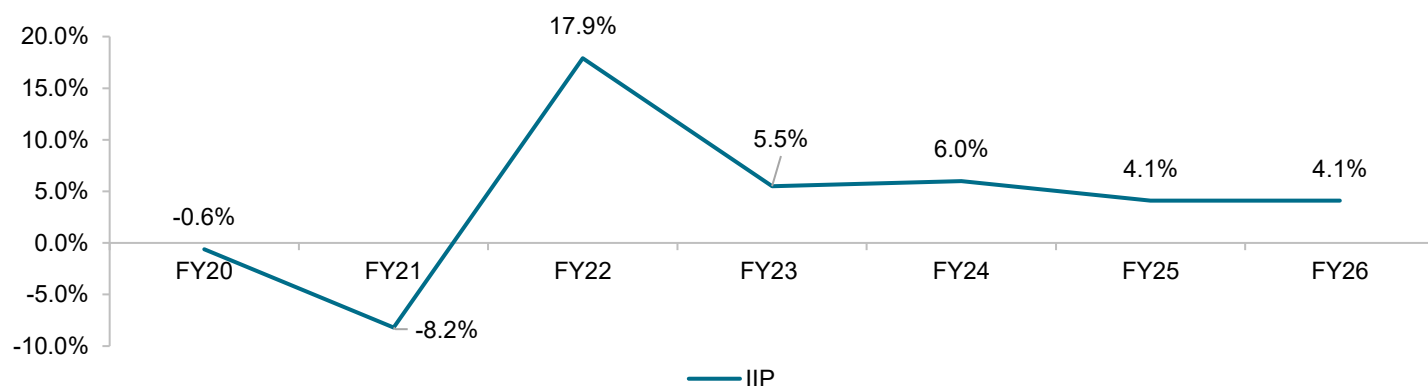
Inflation based on the Consumer Price Index (CPI) averaged 5.50% between fiscals 2020 and 2022 but increased to 6.70% in fiscal 2023 due to surging food prices. It moderated to 5.40% in fiscal 2024, despite food inflation being over 8% in March 2024. CPI-based inflation moderated to 4.60% in fiscal 2025, close to the RBI's medium-term target rate of 4.00%, owing to an expected dip in food inflation aided by a favourable monsoon and high base effect. In fiscal 2026, CPI inflation moderated sharply to 2.1% marking a significant decline from the previous year due to easing food prices and stable core inflation.



Source: National Statistical Office (NSO), Ministry of Industry and Commerce (MoCL), Crisil Intelligence

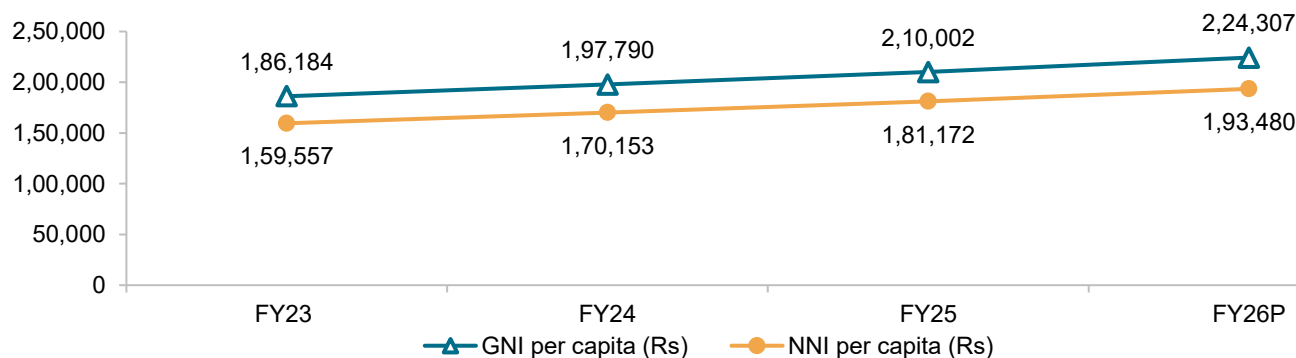
IIP growth trend

The Index of Industrial Production (IIP) averaged 3.7% between fiscals 2019 and 2023 before surging to 6.0% in fiscal 2024, driven by a strong pick-up in the manufacturing of electrical equipment and basic metals. Further, an uptick in the consumer durables sector aided the growth. In fiscal 2025, IIP growth dipped to 4.1% owing to a slower on-year rise in the manufacturing sector's gross value added and remained stable in fiscal 2026.



Source: NSO, MoCL, Crisil Intelligence

Per capita income growth trend (at constant 2022-23 prices)



P – provisional estimates

Note: A new national accounts series has been released with 2022-23 as the base year, superseding the 2011-12 series, with figures available FY23 onwards

Source: NSO, MoCL, Ministry of Statistics and Programme Implementation, Crisil Intelligence

The growth trend in India's gross and net national income (GNI/NNI) per capita has been upward. GNI per capita increased 6.2%, 6.2% and 6.8% on-year in fiscals 2024, 2025 and 2026, respectively, reflecting economic stabilisation and a positive outlook. GNI per capita clocked a steady CAGR of 6.4% while NNI grew at a CAGR of 6.6% between fiscals 2023 and 2026, underscoring the country's economic resilience and potential for sustained development.

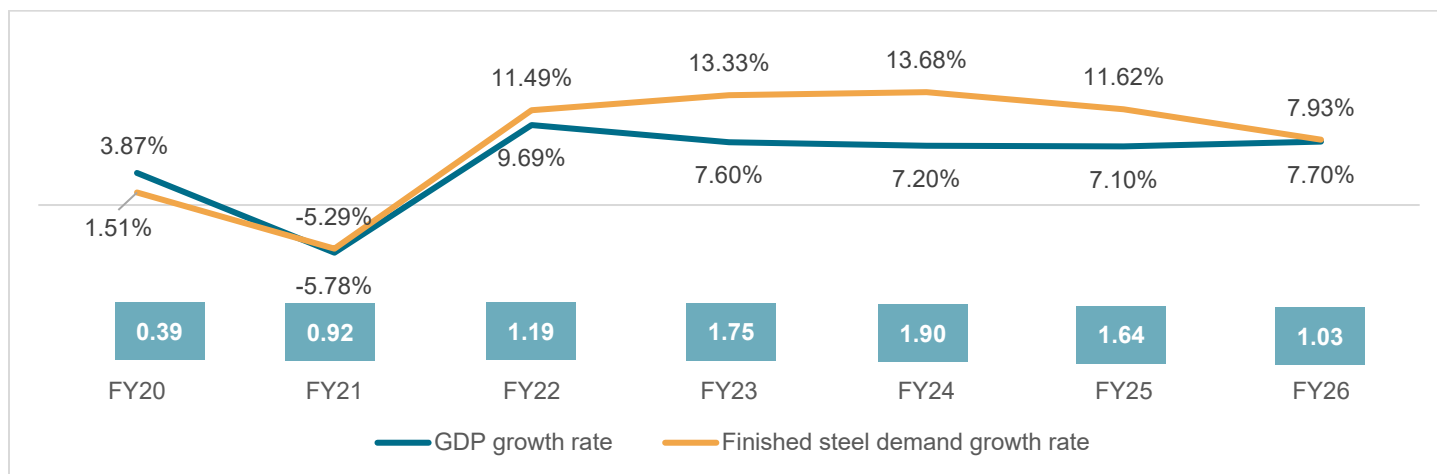
GDP growth and the rise in steel demand

Given the country's huge population and low per capita steel consumption, the steel industry has the potential to become a key economic growth driver. While fiscal 2020 saw a slowdown in major steel consuming sectors (automobile, construction and infrastructure), pandemic-led lockdowns in fiscal 2021 kept the ratio of steel demand increase to GDP growth under 1.

As the economy started reopening in fiscal 2022, the ratio improved to 1.19. In fiscal 2023, it grew to 1.75, driven by recovery in economic activity and strong pent-up demand from key steel consuming sectors. In fiscal 2024 The multiplier rose to 1.9

before falling to 1.64 in fiscal 2025 and 1.03 in 103 in fiscal 2026, on account of higher base effect and normalisation in end use sectors.

Finished steel demand vs GDP growth



Note:

- Figures in boxes represent multiplier of steel demand to GDP growth
- GDP growth rates for FY20-23 are taken as per 2011-12 base year at constant prices and FY24-26 as per base year 2022-23 at constant prices

Source: Crisil Intelligence, Industry

Macroeconomic factors impacting the steel industry

Since the steel industry accounts for a significant share in the domestic manufacturing sector, its performance is influenced by macroeconomic factors, such as GDP growth, inflation, exchange rates and GFCF. The impact of the factors is analysed below:

GDP growth: Growth in the steel industry is closely linked to GDP. As the economy expands, the demand for steel from construction, infrastructure and other manufacturing sectors also increases. Having expanded 11.5% and 13.4% in fiscals 2022 and 2023, respectively, steel demand grew 11.6% on-year in fiscal 2025, backed by government infrastructure spending, strong demand from the automotive and consumer goods sectors. The growth momentum moderated in fiscal 2026, with steel demand increasing by 7.9%, reflecting a high base effect and some normalisation in end-user sector demand.

Inflation: Rising inflation pushes up input costs associated with raw material, energy and transportation, which can impact the profitability of steel manufacturers. Additionally, it can lead to increased interest rates, which hike borrowing costs for businesses and consumers, thereby affecting demand for steel products.

Exchange rates: The exchange rate of the rupee against other major currencies impacts the industry. A stronger rupee can lead to a decrease in the cost of imported raw material, which can reduce the cost of production for steel manufacturers and vice versa.

GFCF: It measures investment in fixed assets, such as machinery, buildings and infrastructure. In fiscal 2026, GFCF surged to Rs 104.35 trillion from Rs 84.53 trillion in fiscal 2023⁶. Between fiscals 2023 and 2026, the Indian steel sector saw significant growth in production, driven by investments in capacity expansion, modernisation and technology upgradation.

⁶ GFCF numbers are based on 2022-23 base year at constant prices

Key government schemes for end-use industries

NSP 2017

The NSP, approved in May 2017 by the Union Cabinet, seeks to boost domestic steel consumption, ensure high-quality steel production and create a technologically advanced and globally competitive steel industry.

Is the policy aims to:

- Increase steel consumption across the infrastructure, automotive and housing sectors, potentially raising per capita steel consumption to 158 kg by fiscal 2030 from ~65 kg in fiscal 2017
- Achieve 300 million tonne of steelmaking capacity by 2030 through additional investments of Rs 10 trillion
- To produce steel domestically for high-end applications, such as electrical steel (cold-rolled grain-oriented), special steel and alloys for power equipment, aerospace, defence and nuclear applications
- To eliminate reliance on steel imports and increase exports to ~24 million tonne by 2030

Historical trend and the vision under NSP

Parameter (million tonne)	NSP 2005	NSP 2017	FY25	FY26
	FY20	FY30		
	(Target)	(Target)		
Crude steel capacity		300	200.33	215
Crude steel production	110	255	152.18	169.23
Finished steel demand	90	230	152.13	164.19
Finished steel import	6	0	9.55	6.53
Finished steel export	26	24	4.86	4.60

Source: Crisil Intelligence, JPC report, NSP 2005, NSP 2017

Steel Quality Control Order

The steel quality control order (QCO) framework is designed to enhance the quality and reliability of domestic and imported steel products. The QCOs mandate all steel and steel products specified must meet the Bureau of Indian Standards (BIS) benchmarks.

All manufacturers, domestic and foreign, must obtain valid BIS licences before commencing regular production or import of the steel products covered by the orders. This improves infrastructure quality through standardised materials and curbs cheap imports that undermine domestic producers across the steel value chain. Currently, 151 Indian standards have been notified under the QCOs, covering carbon steel, alloy steel and stainless-steel products.

Evolution of quality standards

Compulsory licensing and quality control measures for the steel industry were introduced began in 2007 by the Directorate General of Foreign Trade. The Ministry of Steel plans to bring all steel grades consumed in the country under strict quality control norms, aiming to add 1,000 grades under the QCOs in addition to the 1,376 currently covered. This approach aims to prevent the import of poor-quality steel while ensuring domestic products meet international standards, creating a level playing field for Indian manufacturers.

Stainless steel-specific quality control measures

In fiscal 2021, the government took action to curb imports of sub-standard stainless steel by notifying QCOs on various stainless steel flat products, mandating compulsory BIS marking for both domestic production and imports. Recent

developments include the introduction of mandatory BIS certification for stainless steel seamless pipes and tubes, effective from August 1, 2025.

The anticipated National Stainless-Steel Policy is expected to be supported by a robust framework comprising QCOs, BIS standards and PLI schemes. The PLI scheme for specialty steel, launched with a budget of Rs 6,322 crore in July 2021, includes precipitation-hardened stainless steel among its target categories.

Domestic demand for stainless steel, which grew 4.4% year-on-year to 4.7 million tonne in fiscal 2026, is expected to offset part of imports while providing opportunities for domestic manufacturers to expand their market share. The comprehensive quality control framework, combined with supportive policies and financial incentives, positions India's stainless-steel industry for sustained growth and enhanced competitiveness in global markets.

PLI scheme

To enhance the country's manufacturing capabilities and exports, an incentive outlay of Rs 1.97 trillion (over \$26 billion) is underway under the PLI schemes for 14 key sectors. The schemes aim to attract domestic and foreign investments in the areas of core competency and apply cutting-edge technology, ensure efficiencies, create economies of scale and boost exports to make India an integral part of the global value chain.

Particulars	Units	Amount
PLI scheme led investment	Rs trillion	2.16
PLI scheme production/sales	Rs trillion	20.41
PLI scheme led exports	Rs trillion	8.3
PLI led employment generation	In million	1.44 (direct and indirect)

Note: All figures in the table are until December 2025

Source: Press Information Bureau (PIB)

Benefits of the PLI scheme

Large-scale electronics manufacturing sector

- Manufacturing of various electronic components, such as batteries, chargers, printed circuit boards, camera modules, passive components and certain mechanics have been localised
- Production of mobile phones surged by over 157% and exports increased 8x since fiscal 2020
- Foreign direct investment in the large-scale electronics manufacturing sector increased ~254% since the inception of the PLI scheme

Pharmaceuticals sector

- As of December 2025, the committed investment of Rs 17.28 billion targeted over the six-year period of the scheme stands substantially exceeded with cumulative investment of Rs 41.92 billion made in both brownfield and greenfield projects
- 726 bulk drugs are being manufactured under the scheme, including 191 which have been manufactured for the first time in the country.
- India commenced localised production of 39 medical devices, such as computed tomography scan, linear accelerator, rotational cobalt machine, C-arm, magnetic resonance imaging (MRI), catheterisation laboratory, ultrasonography, dialysis machine, heart valves and stents

Telecom sector

- Sales of telecom and networking products have increased more than six-fold over the base year fiscal 2020
- India has become almost self-reliant in antennae, gigabit passive optical network) and customer premises equipment
- PLI beneficiary companies achieved a 370% increase in sales of telecom and networking products in fiscal 2024 vis-a-vis base fiscal 2020

Food processing sector

- There has been a significant increase in the sourcing of raw material from India, benefitting domestic farmers and small-scale industries
- Sales of organic products have increased, enhancing the visibility of Indian brands in the global market
- Adoption of advanced technologies such as automated seafood processing equipment has enhanced efficiency, quality and export readiness
- The scheme has also led to sale of millet based products increasing over four times between fiscals 2023 and 2025.

Specialty steel sector

- The Ministry of Steel has targeted generating investment of Rs 295.3 billion, an additional capacity of 25 million tonne for producing specialty steel grades and additional employment to about 17,000 people between fiscals 2024 and 2028 through its PLI programme
- In fiscal 2024, an estimated Rs 160 billion was invested in the steel industry. In fiscal 2025, Rs 10 billion more is expected to have been invested through the PLI scheme

PLI scheme 1.2

The PLI scheme 1.2, introduced in November 2025, focuses on new investments in emerging and advanced steel products, such as super alloys, cold rolled grain oriented steel, stainless steel long and flat products, titanium alloys and coated steels.

The scheme covers 22 product sub-categories under three broad categories: (a) steel grades for strategic sector (including stainless steel rolled products in coil, sheet, plate or long products forms and stainless-steel forged products), (b) commercial grades and (c) coated products. In the PLI 1.2 scheme, super alloys and titanium alloys have been included under the category of steel grades for strategic sector, owing to their key applications in the aerospace and defence industries.

This version of the scheme will operate within the original allocation of Rs 63.22 billion for the steel industry.

PSI 2013 by the Maharashtra government

The PSI 2013 introduced by the government of Maharashtra is a comprehensive framework designed to accelerate industrial development and address regional economic imbalances. It provides fiscal and non-fiscal benefits for a wide variety of industries and supports the capital-intensive nature of stainless-steel production, creating a favourable ecosystem for manufacturers to establish and expand operations.

The scheme's tiered incentive structure offers higher benefits to units in less-developed areas, serving the dual objectives of industrial growth and balanced regional development. The scheme provides a range of incentives for new and existing industrial units, including micro, small, and medium enterprises (MSMEs) and large-scale industries. These incentives comprise industrial promotion subsidy (IPS) on gross state goods and services tax (SGST), power tariff subsidy and stamp duty exemption. The IPS is offered at 100% of gross SGST for MSMEs and 50% for large-scale industries, and 40% of net SGST for special large-scale industries. Additionally, the scheme provides investment promotion subsidy linked to actual eligible fixed capital investment.

The scheme delivers critical capex support through a maximum ceiling of incentives as a percentage of fixed capital investment, ranging from 25-100% with ceiling limits based on unit classification. These subsidies significantly reduce the financial burden during the establishment phase, allowing producers to allocate resources towards technological advancement and operational efficiency. The power tariff subsidies (Rs0.5-1/unit) directly address one of the industry's most significant operational costs, enhancing competitiveness against imports.

By reducing production costs and enhancing global competitiveness, the scheme can drive revenue and Ebitda growth for stainless-steel manufacturers in the coming years, enabling them to capture a larger share of the domestic and international markets.

Investment scenario in domestic steel manufacturing industry

India's crude steel capacity stood at ~215 million tonnes in fiscal 2026. With the growing demand for steel in the domestic end-use industries, such as infrastructure and automobile, the domestic steel producers are planning to ramp up their production output by increasing their manufacturing capacities and improving their capacity utilisation levels.

- Between fiscal 2026 and 2028, India is expected to add 25-30 million tonnes of crude steel manufacturing capacity. This expected volume of capacity addition in India is similar to the planned capacity additions by the ASEAN⁷ countries and the Middle Eastern countries over the same period, which are also investing heavily in the steel sector. Notably, ASEAN and Middle Eastern countries are planning to add 30-35 million tonnes and 8-10 million tonnes of crude steel production capacities, respectively, during the same period.
- Between fiscals 2026-2031, Indian steel makers are expected to add ~65 million tonnes of crude steel production capacity, which would take Indian steel manufacturing capacity to ~280 million tonnes in fiscal 2031.

Current and planned crude steel manufacturing capacities of key Indian steel producers

Steel producer	Units	FY 2026 capacity	FY 2031 expected capacity
SAIL	Million tonnes per annum	21	29
RINL	Million tonnes per annum	7	7
Tata Steel Ltd.	Million tonnes per annum	27	33
AMNS	Million tonnes per annum	10	18
JSW Ltd.	Million tonnes per annum	36	47
JSPL	Million tonnes per annum	16	19
NMDC	Million tonnes per annum	3	3
Others	Million tonnes per annum	96	123
Total	Million tonnes per annum	215	280

Source: Crisil Intelligence, Industry

SAIL: Steel Authority of India Ltd., RINL: Rashtriya Ispat Nigam Ltd., JSPL: Jindal Steel and Power Ltd.

Note: Capacities of Tata Steel Ltd. include capacities of Bhushan Steel Ltd. (BSL) and Neelachal Ispat Nigam Ltd. (NINL); Capacities of JSW Ltd. include capacities of Bhushan Power & Steel Ltd. (BPSL) and Monnet Ispat and Energy Ltd

Investment scenario in end-use sectors

The government's focus on infrastructure development was evident in the Union Budget 2026-2027 allocations.

Infrastructure

⁷ ASEAN: Association of Southeast Asian Nations comprising of 10 countries in the south-east Asia region

- In Union Budget 2026-2027, the government allocated a capital expenditure of Rs 12.2 trillion for the infrastructure sector.
 - The government proposed the development of new dedicated freight corridors connecting Dankuni in the East to Surat in the West, announced to operationalise 20 new national waterways (NW) over the next five years and announced to develop an integrated east coast industrial corridor with a well-connected node at Durgapur
 - The government also announced the development of seven high-speed rail corridors between cities as growth connectors, namely i) Mumbai-Pune, ii) Pune-Hyderabad, iii) Hyderabad-Bengaluru, iv) Hyderabad-Chennai, v) Chennai-Bengaluru, vi) Delhi-Varanasi and vii) Varanasi-Siliguri
- Further, flagship programmes such as the National Infrastructure Pipeline (NIP), PM Gati Shakti and Bharatmala are accelerating project execution and improving connectivity. These investments are creating sustained demand for steel-intensive construction and engineering applications.

Note: Overall, the infrastructure segment accounts for ~28-30% of the aggregate finished steel demand. Within the segment, roads and highways and the railways (including metros) account for 50-60% of steel demand. Other significant contributors include sectors such as irrigation, dams, water supply and sanitation.

Real estate

- The Indian real estate sector has witnessed a recovery in residential demand, alongside a steady growth in commercial, warehousing and data centre segments.
- Affordable housing initiatives and urban redevelopment projects are further supporting construction activity. Increasing urbanisation and rising income levels are expected to sustain long-term demand in this sector.

Oil and gas

- Investments in oil and gas exploration, pipeline infrastructure, city gas distribution (CGD) and refining capacity expansion remain a priority for enhancing energy security.
- Government initiatives to expand the natural gas grid and promote cleaner fuels are driving pipeline and processing infrastructure development. This supports demand for specialised steel products, including pipes and tubes.

Automobile

- The automobile sector is benefiting from improving domestic consumption, export opportunities and policy support for electric vehicles (EVs).
- Capacity expansions, localisation of components and investments in new model development are strengthening the manufacturing ecosystem. Growth in passenger vehicles, commercial vehicles and electric vehicles is contributing to steady steel consumption.

Industrial development

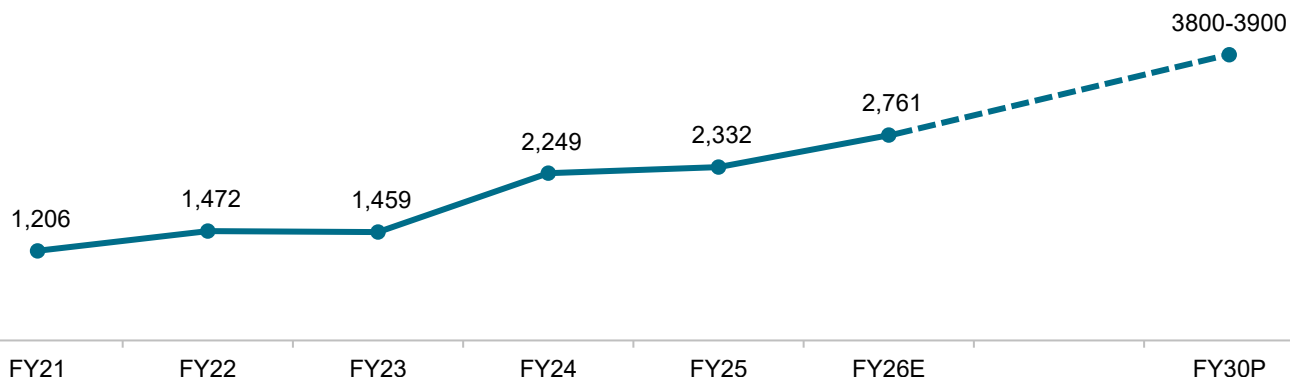
- India's push towards manufacturing-led growth under initiatives such as "Make in India" and Production-Linked Incentive (PLI) schemes is encouraging capacity additions across sectors, including electronics, defence, chemicals and capital goods.
- Increased private capex and foreign direct investment (FDI) inflows are strengthening industrial output, which in turn is expected to generate incremental demand for steel and value-added metal products.

Investment in steel pipes and tubes and related infrastructure segments

Various projects and schemes initiated by the central and several state governments have been driving demand for steel pipes and tubes. These plans are expected to consume steel pipes and tubes in the near to medium term. Water supply, sanitation, irrigation and flood control have consistently been the top end-use sectors for the steel pipe industry. They are

expected to drive demand for steel pipes and tubes over the next few years as well, through government-led schemes such as Jal Jeevan Mission and Har Ghar Nal Yojana.

Water supply, sanitation and irrigation-related investments in India (Rs billion)



Note: E: Estimates P – projected

Source: Crisil Intelligence, Industry

In India, annual investment in water supply, sanitation and irrigation increased to an estimated Rs 2,761 billion in fiscal 2026 from Rs 1,206 billion in fiscal 2021, clocking a CAGR of ~18%. The rise in investment was led by increased initiatives of central and state governments to enable access to piped water for domestic consumption, flood control and effective irrigation practices. Investment is projected at Rs 3,800-3900 billion in fiscal 2030, logging a CAGR of ~7% from fiscal 2026 on the back of the government mission to ensure 100% coverage of piped water supply across the country.

State-wise investment scenario

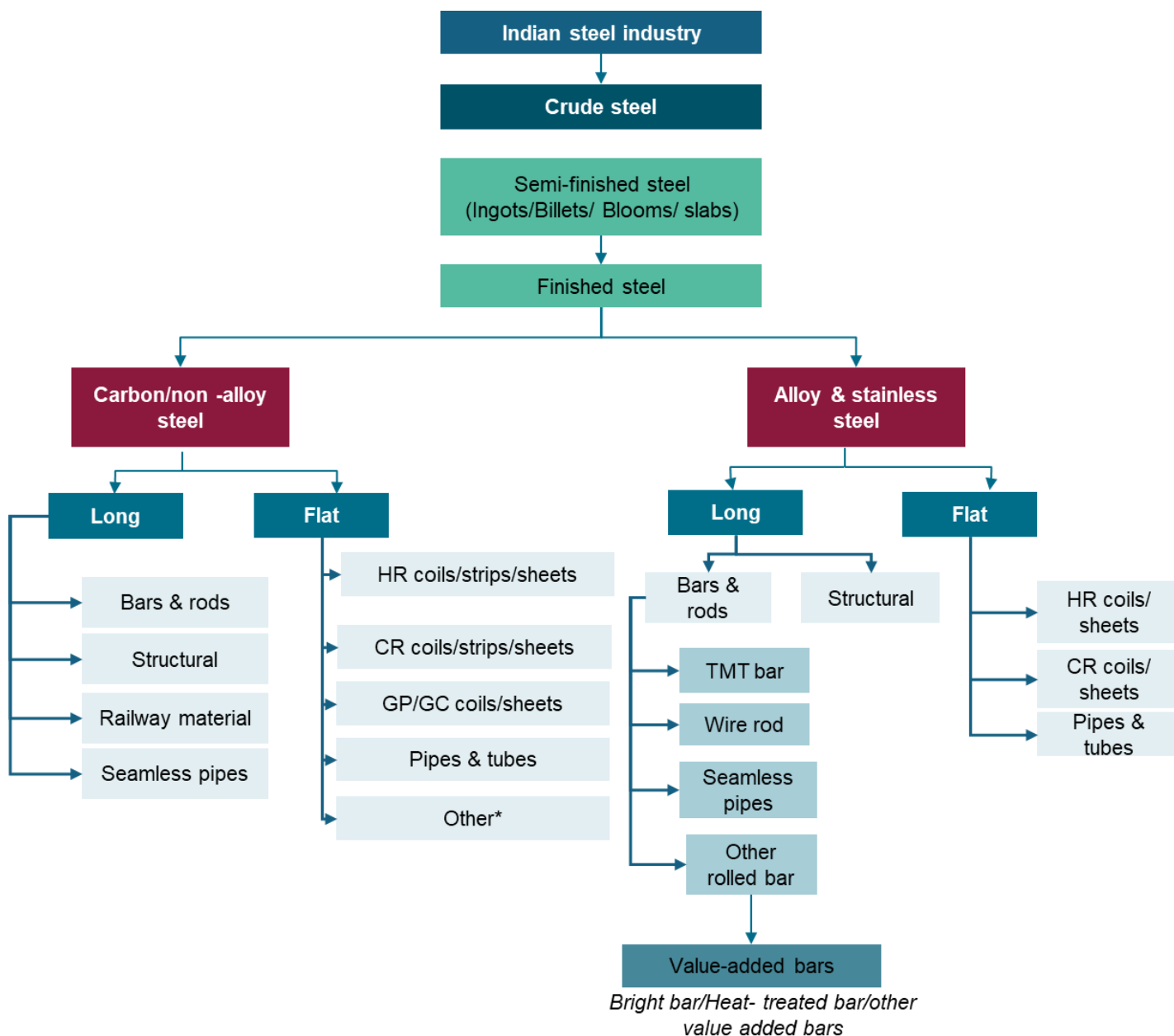
State	Coverage under Jal Jeevan Mission (%)	Other projects
Uttar Pradesh	91%	Automatic water stations, Namami Gange, minor irrigation projects
Maharashtra	91%	Dug well and bore well programme
Karnataka	87%	Development of canals, water purification plants
Odisha	77%	Multiple mega-piped water supply projects
Telangana	100%	Minor and major irrigation projects
Madhya Pradesh	75%	Development of canals, irrigation projects
Rajasthan	59%	Development of canals, irrigation projects
Gujarat	100%	Development of canals, irrigation projects
Andhra Pradesh	75%	Development of canals, irrigation projects
India	82%	

Source: e-Jal Shakti portal of Government of India, Industry, Crisil Intelligence

As of June 2026, the coverage of Jal Jeevan Mission stood at ~82% in India. Among states with the highest budget for water supply, sanitation, irrigation and flood control, Rajasthan, Madhya Pradesh, Odisha, Andhra Pradesh and Karnataka have the lowest coverage of Jal Jeevan Mission. On the other hand, Telangana and Gujarat have 100% coverage of Jal Jeevan Mission.

Indian steel industry overview

Structure of Indian steel industry



* Others include prime plate plates, hot strip mill plates, colour-coated coils/sheets, electrical coils/sheets, tin plates, tin-free steel, tin mill black plates and pipes

HR: hot rolled; CR: cold rolled

Source: Crisil Intelligence, Industry

Note: Pipes and tubes included under both the flat carbon or non-alloy steel segment and the flat alloy and stainless-steel segment include hollow section pipes and welded pipes.

Types/definition of steel

By product

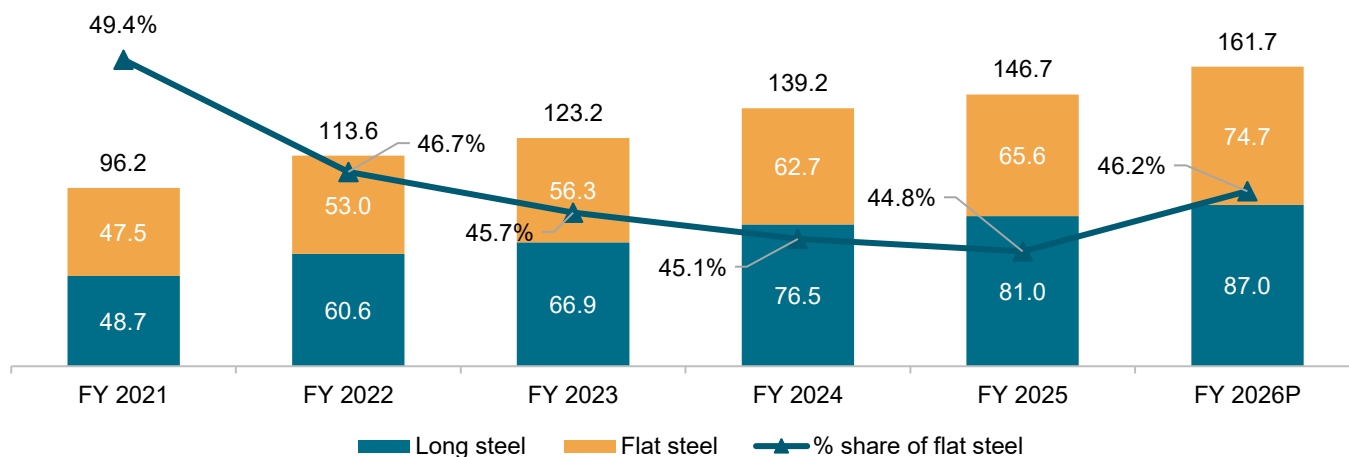


Long products: Finished long steel products are typically produced by hot rolling or forging of bloom/billets/ingots into useable shape/sizes. These are normally supplied in straight length/cut length, except wire rods, which are supplied in wound coils. Different types of long products include bar and rods (thermo-mechanically treated, or TMT bars, wire rods and round bars), structural steel (angles, channels, beams, fabricated sections and girders) and railway materials.



Flat products: Flat products are produced from slabs/thin slabs in rolling mills using flat rolls, and comprise hot rolled (HR) and cold rolled (CR) coils and coated products. HR flat products are produced by re-rolling slabs/thin slabs at high temperatures (above 1,000°C) in plate mills or in hot strip mills. CR coils/strips are produced by cold rolling HR coils/strips in cold rolling mills (normally at room temperature). CR coils/strips/sheets are characterised by lower thickness, better/bright finish and specific mechanical/metallurgical properties.

India finished steel production- long vs flat (in million tonne)



Source: Crisil Intelligence, Industry, Joint Plant Committee (JPC)

Note: P: Provisional

By composition

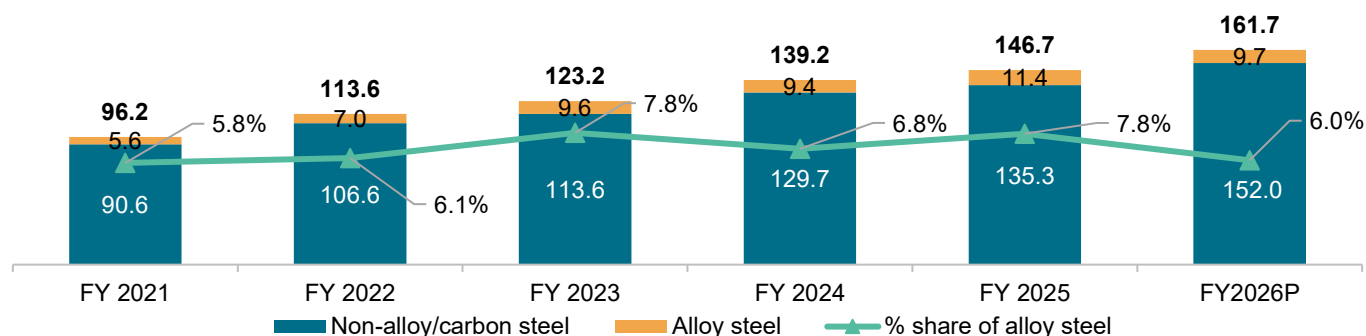
Alloy steel: Steel that is produced with one or more elements in specified proportions to impart specific physical, mechanical, metallurgical and electrical properties is called alloy steel. Stainless steel is a type of alloy steel.

Alloy/stainless steel is manufactured in different grades, with varying proportions of carbon and other elements. Common elements used to make alloys are manganese, silicon, nickel, lead, copper, chromium, tungsten, molybdenum, niobium and vanadium.

Alloy/stainless steel is used in forgings, tools and dies, bearings and fasteners, which are subsequently used by end-use sectors such as automobiles, power, oil and gas, industrial machines, railways/mass rapid transport systems and defence to manufacture products such as crankshafts, connecting rods, cam shafts, bearings, fasteners, railway carriage wheels, bomb shells, cutting tools, surgical instruments and utensils.

Non-alloy steel: Non-alloy or carbon steel comprises iron and carbon. It is the most produced variant of steel (accounting for 93-95% of India's finished steel production in the past five years). The main components are carbon, manganese and silicon in proportions of up to 1.70%, 0.90% and 0.30%, respectively. A change in the composition of carbon affects the properties of carbon steel. Steel, by definition, does not contain any alloying element. Non-alloy steel is used in end-user sectors such as construction, infrastructure, automobiles and consumer durables. Popular applications include buildings, bridges, rails, pipelines, body panels for cars, refrigerators and washing machines.

India finished steel production- non-alloy/carbon vs alloy steel (in million tonne)



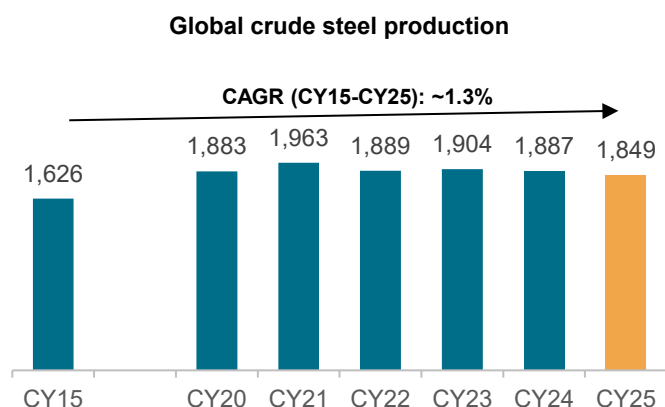
Source: Crisil Intelligence, Industry, Joint Plant Committee (JPC)

Note: P: Provisional; alloy steel production volume considers stainless steel as well.

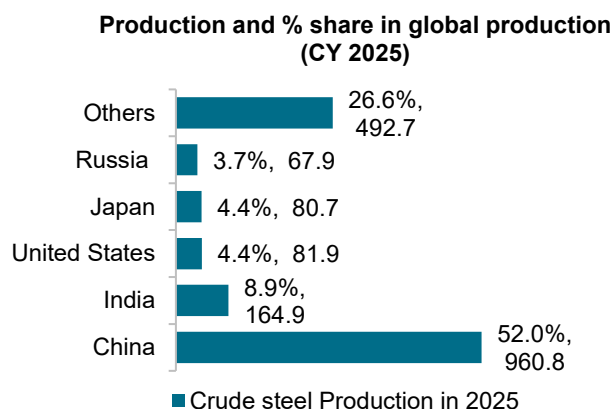
India's position in global steel industry

The global crude steel production clocked a nominal CAGR of ~1.3% from 1,626 million tonne in 2015 to 1,849 million tonnes in 2025. However, between 2020 and 2025, crude steel production has remained largely rangebound, growing from 1,883 million tonne in 2020 to 1,887 million tonne in 2024, before declining to 1,849 million tonne in 2025. China, which has been the largest steel producer in the world for a long period, produced 960.8 million tonnes of crude steel in 2025, accounting for ~52% of the total global crude steel production in the year. It was followed by India, which produced 164.9 million tonne of crude steel, accounting for a share of 8.9% in global crude steel production in calendar year 2025.

Global crude steel production (between calendar years 2015 and 2025); share of major countries in calendar year 2025 (volumes in million tonne)

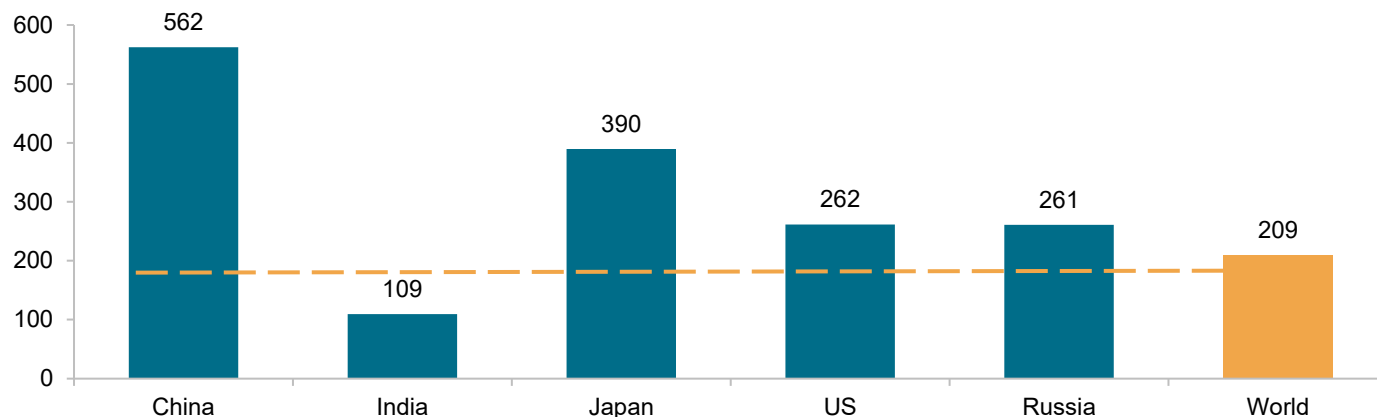


Source: World Steel Association



In India, the demand for finished steel in fiscal 2026 increased ~8% on-year to 164.2 million tonne backed by strong growth in construction and infrastructure segment.

Per capita steel consumption in India compared with global benchmarks 2025 (in kg)

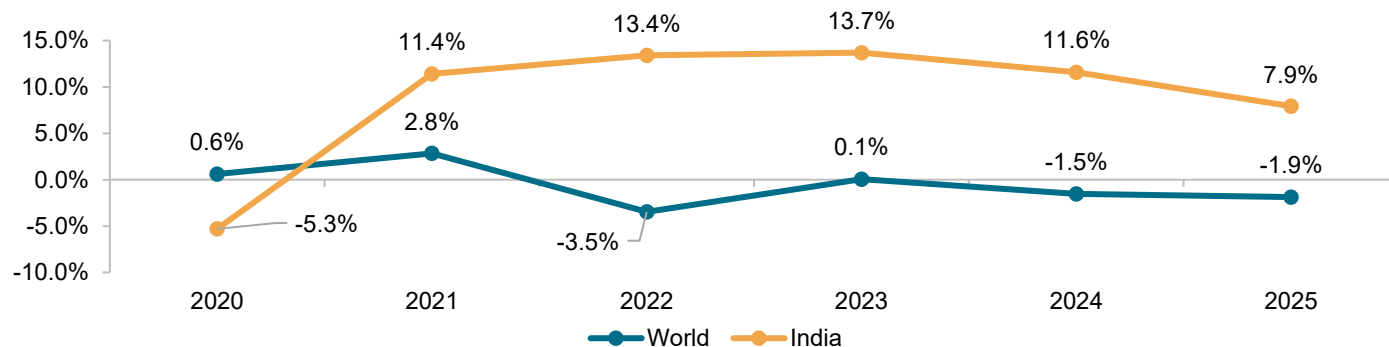


Source: World Steel Association

The global average per capita steel consumption was 209 kg in 2025. However, the US, Russia, Japan and China had higher steel intensity owing to significantly higher investment in infrastructure projects; hence, their per capita steel consumption is above the world average.

On the other hand, India's per capita steel consumption was only at 109 kg in calendar year 2025, which was around half of the global average per capita steel consumption. However, with increasing thrust on infrastructure development, the underpenetrated Indian steel market holds considerable growth potential.

Growth in Indian steel demand compared with global steel demand



Source: World Steel Association, JPC, Crisil Intelligence, Industry

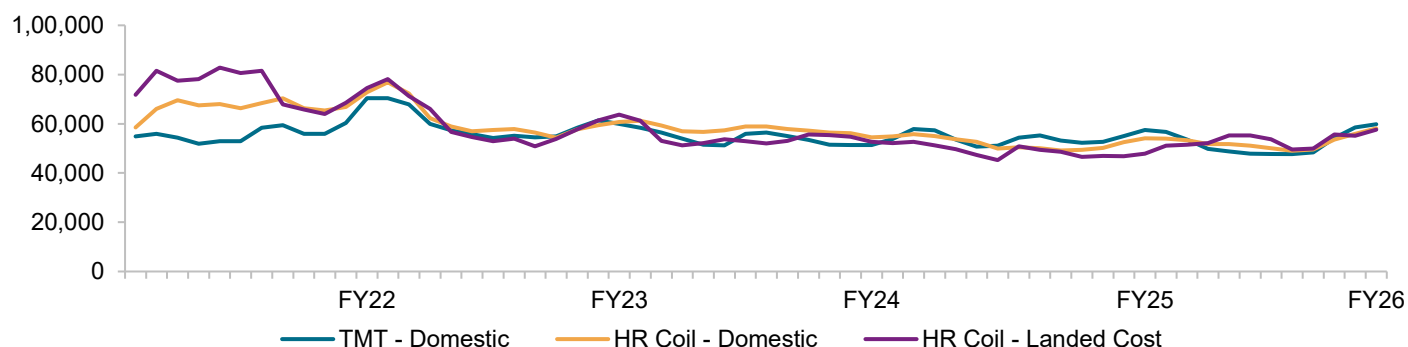
Note: Years mentioned on the horizontal axis correspond to calendar years for the world; for India, these correspond to the nearest fiscals; for example, the year 2020 corresponds to fiscal 2021 and so on

At the global level, all major economies registered an on-year decline in steel demand in 2020, owing to Covid-19-led disruptions in key end-use industries. However, in that year, the demand for steel in China grew ~9-10% on-year, on account of the country's quick recovery from the first wave of Covid-19 and a receipt of a stimulus package to spur industrial and economic activity. This pushed the average on-year demand growth of finished steel above that of India in the year. In 2021 and the following years, the steel demand in India rebounded strongly, led by the recovery of economic activity post-pandemic and pent-up demand from major steel-consuming sectors.

Price trend of steel and key raw materials

Steel price trend in the domestic market (Rs/tonne)

The domestic price of thermos-mechanically treated (TMT) bars and hot rolled (HR) coil and the landed cost of HR coil peaked in fiscal 2022 before witnessing a slight decline. In fiscal 2026, the per tonne domestic prices for TMT and HR coil were Rs 52,532.2 and Rs 52,700.0, respectively, while the landed cost for HR coil was Rs 52,887.6 per tonne.



Source: Crisil Intelligence, Industry

Note:

1. The prices of China-made HR coils have been considered for the calculation of the landed cost of HR coils in India. Landed cost further includes currency exchange rate, basic customs duty of 7.5%, cess charges of 10% on basic customs duty, freight charges on a per-tonne basis and handling charges amounting to 2% of the import price
2. The prices shown above are average for the corresponding fiscals

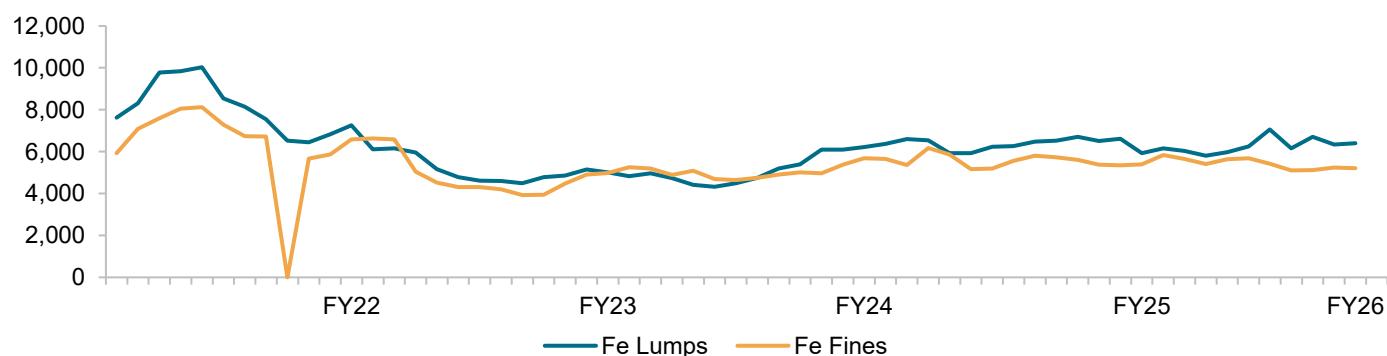
Average price in Rs per tonne	FY22	FY23	FY24	FY25	FY26
TMT – Domestic	56,941.3	59,145.5	53,884.7	53,943.8	52,532.2
HR coil – Domestic	67,183.3	60,958.3	57,641.7	51,983.3	52,700.0
HR coil – Landed cost	74,545.8	60,105.3	54,000.1	48,969.6	52,887.6

Source: Crisil Intelligence, Industry

Note: The prices shown above are average for the corresponding fiscals

Raw material price trend in the domestic market (Rs/tonne)

Iron ore (Rs per tonne)



The annual average prices of iron lumps and fines peaked in fiscal 2022 during the past five-year period, owing to underperformance of the supply of iron ore from three major exporters to India, namely Australia, Brazil and South Africa, amid geopolitical uncertainties in prices in fiscal 2022.

Average price in Rs per tonne	FY22	FY23	FY24	FY25	FY26
Fe Lumps	8,071.3	5,140.8	5,125.2	6,392.4	6,254.7
Fe Fines	6,260.8	6,260.2	6,110.3	5,868.9	5,492.9

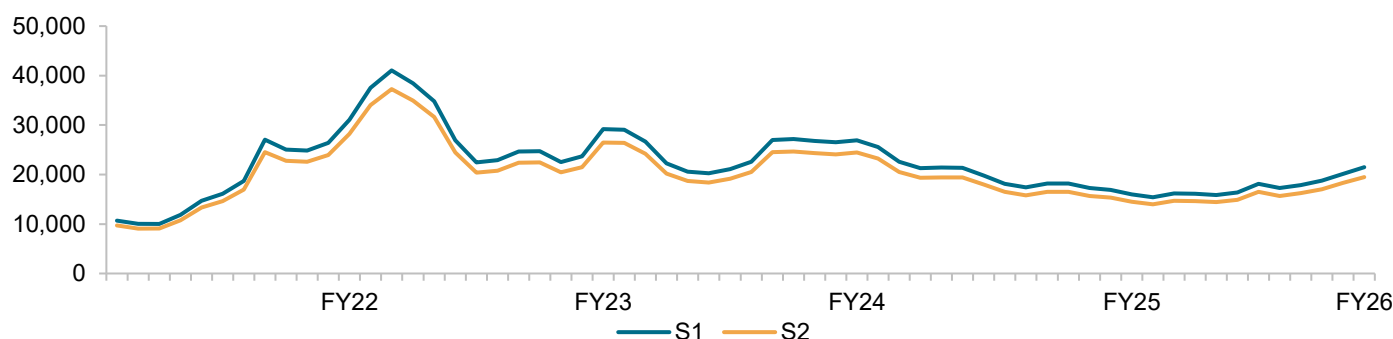
Source: Crisil Intelligence, Industry

Note:

1) The prices are for iron ore grade with Fe content in the 62-65% range

2) The prices shown above are average for the corresponding fiscals

Coking coal (INR per tonne)



Source: Ministry of Coal, Crisil Intelligence, Industry

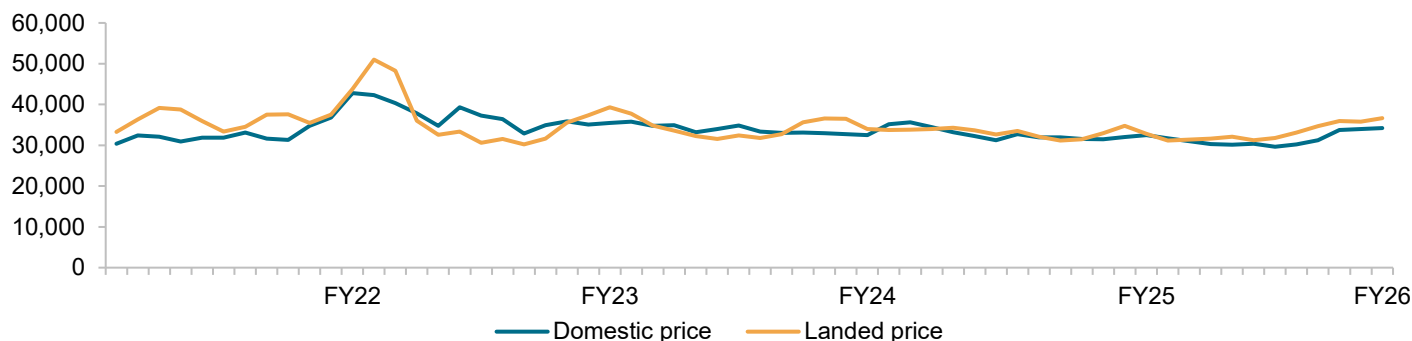
The average prices of coking coal surged strongly on-year in fiscal 2023 to Rs 29,072.8 per tonne for S1 grade and 26,396.0 for S2 grade from the price of ~Rs 18,866.7 per tonne for S1 grade and Rs 17,129.8 per tonne for S2 grade a year earlier. This strong growth in the prices of coal in fiscal 2023 happened on account of coal price premiums through domestic spot e-auction (conducted by Coal India Ltd) reaching an all-time high due to reduced coal supply in the fiscal.

Average price in INR per tonne	FY22	FY23	FY24	FY25	FY26
Coking coal					
S1	18,866.7	29,072.8	24,737.2	19,833.6	17,461.2
S2	17,129.8	26,396.0	22,459.7	18,007.8	15,853.8

Source: Crisil Intelligence, Industry

Note: The prices shown above are average for the corresponding fiscals

Steel scrap (Rs per tonne)



The average prices of steel scrap peaked in fiscal 2022 on account of an increase in demand from the steel manufacturing sector, owing to the resumption of economic and industrial activities post-pandemic.

Average price in Rs per tonne	FY22	FY23	FY24	FY25	FY26
Steel scrap (domestic)	33,333.3	36,875.0	33,779.2	32,798.8	31,596.3
Steel scrap (landed)	36,935.9	36,462.8	34,130.6	33,170.8	33,202.5

Source: Crisil Intelligence, Industry

Note:

1. Prices don't include goods and service taxes (GST)
2. Landed prices pertain to those of Rotterdam exports and consider an exchange rate of ~ Rs 83.90 per United States Dollar (USD), a basic customs duty of 2.5%, freight charges of USD 30 per tonne and handling charges of 2% of the import price.
3. The prices shown above are average for the corresponding fiscals

Stainless steel price trends with the pass-on effect from raw material price fluctuations

On-year change in prices of	FY23	FY24	FY25	FY26
Domestic stainless-steel prices	-14%	-21%	-5%	4%
Nickel (LME)	24%	-24%	-15%	-5.7%

Source: Crisil Intelligence, Westmetall, Industry

From the above table, it can be observed that changes in domestic stainless-steel prices largely followed changes in prices of key raw material nickel (LME price). For example, as the nickel prices fell 24% on-year in fiscal 2024, domestic stainless-steel prices also decreased 21% on-year. A similar trend was observed in fiscal 2025, wherein nickel LME prices and stainless-steel prices decreased on-year. In fiscal 2023, stainless-steel prices dipped 14% on-year despite an on-year increase of 24% in nickel (LME) prices, owing to a supply-demand balance led by increased stainless steel supply from China and other Asian countries.

The fluctuations in stainless steel prices are largely attributed to the volatility in nickel prices, which were significantly impacted by the Ukraine war and geopolitical uncertainty. The sharp surge and subsequent decline in nickel prices were a result of force majeure events that disrupted global supply chains and commodity markets, rather than a normal business cycle. This highlights the stainless-steel industry's vulnerability to global events and commodity price fluctuations, emphasising the need for stakeholders to closely monitor and adapt to changing market conditions.

US steel and aluminium tariff hikes

As of June 2026, the US Section 232 tariffs on steel and aluminium remain in effect but have undergone significant adjustments since their initial implementation in 2018. The current framework features a tiered tariff system, with a 50% tariff applied to goods made predominantly of steel, aluminium and/or copper. Derivative products are subject to varying rates of 25%, 15% or 10% tariffs, depending on their metal content and complexity. Certain exemptions and quota arrangements continue to be in place for specific trading partners such as South Korea, Brazil, the EU, Japan and the UK, reflecting ongoing negotiations and trade adjustments.

The White House has issued multiple proclamations to modify and extend tariff measures, with the latest updates in June 2026 indicating a more flexible and dynamic tariff regime. These changes aim to balance protecting domestic industries with maintaining trade relationships and market stability. The administration has also temporarily reduced tariffs on certain agricultural and industrial equipment through the end of 2027, provided they meet specific US content requirements.

Global trade flows have demonstrated resilience despite the complexities introduced by tariffs, though uncertainties persist. Countries such as Canada and China, and the EU have responded with retaliatory measures, including tariffs and trade restrictions, which continue to influence market dynamics. India's exports to the US face ongoing scrutiny through antidumping and countervailing duty investigations across multiple steel and aluminium product categories.

India's direct exposure to the US market remains limited, with steel exports at \$740 million and aluminium at \$1,108 million in 2026, and is unlikely to be impacted materially because only 5% of finished steel was exported to the US in fiscal 2026. However, the tariffs' indirect consequences could be severe. Major US suppliers such as Canada and Brazil face steep export barriers, likely diverting surplus steel to alternative markets such as India. There could be a similar effect to the 2018 scenario, where redirected exports from tariff-hit nations flooded India, depressing domestic prices and squeezing the margins of domestic producers. Compounding this, Chinese overcapacity—with a shift toward flat steel products—threatens to exacerbate dumping risks, further destabilising India's market.

Secondary effects on the Indian market

Domestic price pressure: A surge in dumped imports could reverse recent gains in India's steel sector, which saw an increase in imports (primarily from China) in 2025. Small-scale producers, lacking economies of scale, are particularly vulnerable to low-cost competition.

Currency volatility: The rupee may face depreciation pressure as trade uncertainties escalate, impacting input costs for manufacturers.

Policy responses: A safeguard duty investigation has already been initiated to assess injury risks from surging imports. The Directorate General of Trade Remedies (DGTR), under the Ministry of Commerce and Industry, has recommended the imposition of a 12% safeguard duty tapering annually on non-alloy and alloy steel flat products for a period of 3 years. This recommendation aims to protect the domestic industry from the recent surge in imports of these products.

The investigation into the sudden increase in imports of these steel products, which are used in various industries such as fabrication, pipe making, construction, capital goods, auto, tractors, bicycles and electrical panels, was initiated by the DGTR in December 2024. Following preliminary findings in March 2025, the directorate has determined that critical circumstances exist, warranting the application of provisional safeguard measures to prevent irreparable damage to the domestic industry.

The 2025 tariffs underscore a resurgence of protectionism, with India caught in the crossfire of global market realignments. Although direct export losses are manageable, the indirect fallout—dumped imports, price volatility and retaliatory trade measures—poses acute challenges. Proactive policy interventions, coupled with industry efforts to diversify supply chains and enhance competitiveness, will be critical in mitigating risks.

Notwithstanding the potential risks associated with China's dumping practices, the Indian steel industry has demonstrated remarkable resilience, leveraging the protective measures afforded by the Bureau of Indian Standards (BIS) certification for

finished goods. This strategic approach, fully aligned with World Trade Organization (WTO) regulations, ensures that imported products adhere to stringent quality and safety standards, effectively mitigating the risk of substandard imports inundating the domestic market. The government's proactive stance in bolstering BIS standards to curb cheap imports has been instrumental in safeguarding the interests of domestic steel manufacturers. By expanding the scope of BIS standards to encompass virtually all steel grades, India has significantly reduced opportunities for imports to circumvent regulations, creating a level-playing field that prioritises quality and consumer safety.

The implementation of trade remedial measures, including anti-dumping duties (ADD) and countervailing duties (CVD) by the DGTR, further reinforces India's defence against dumped imports. The WTO's Technical Barriers to Trade (TBT) Agreement lends support to India's stance by encouraging the adoption of international standards—which BIS adheres to—ensuring that India's measures are both effective and WTO-compliant. This nuanced balance between trade liberalisation and protection of domestic industries enables India's steel sector to navigate the complexities of global trade with confidence, leveraging its inherent strengths and strategic policy frameworks to maintain competitiveness and growth momentum. By adhering to international trade norms while safeguarding its economic interests, India reaffirms its commitment to fair trade practices and its resolve to protect its domestic industry from unfair competition, ensuring a stable and sustainable growth trajectory for the steel sector.

Impact of US-Iran conflict on the Stainless Steel industry

The US–Iran conflict impacts India's stainless steel industry mainly through higher energy, logistics and input costs, rather than direct demand exposure. Disruption around the Strait of Hormuz raises crude oil, LNG, freight and insurance costs, increasing power, fuel and transportation expenses for domestic producers.

Imported inputs such as nickel, ferroalloys, scrap, electrodes and refractories may also become costlier due to higher shipping rates and risk premiums, pressuring margins and export competitiveness.

On the demand side, elevated inflation and energy costs could moderate consumption from end use industries like construction, consumer durables, automotive and industrial equipment. The near-term impact is likely to be cost inflation, margin pressure and softer demand momentum, with the extent of West Asian tensions remaining a key monitorable.

Assessment of stainless-steel products

Structure of Indian stainless-steel industry

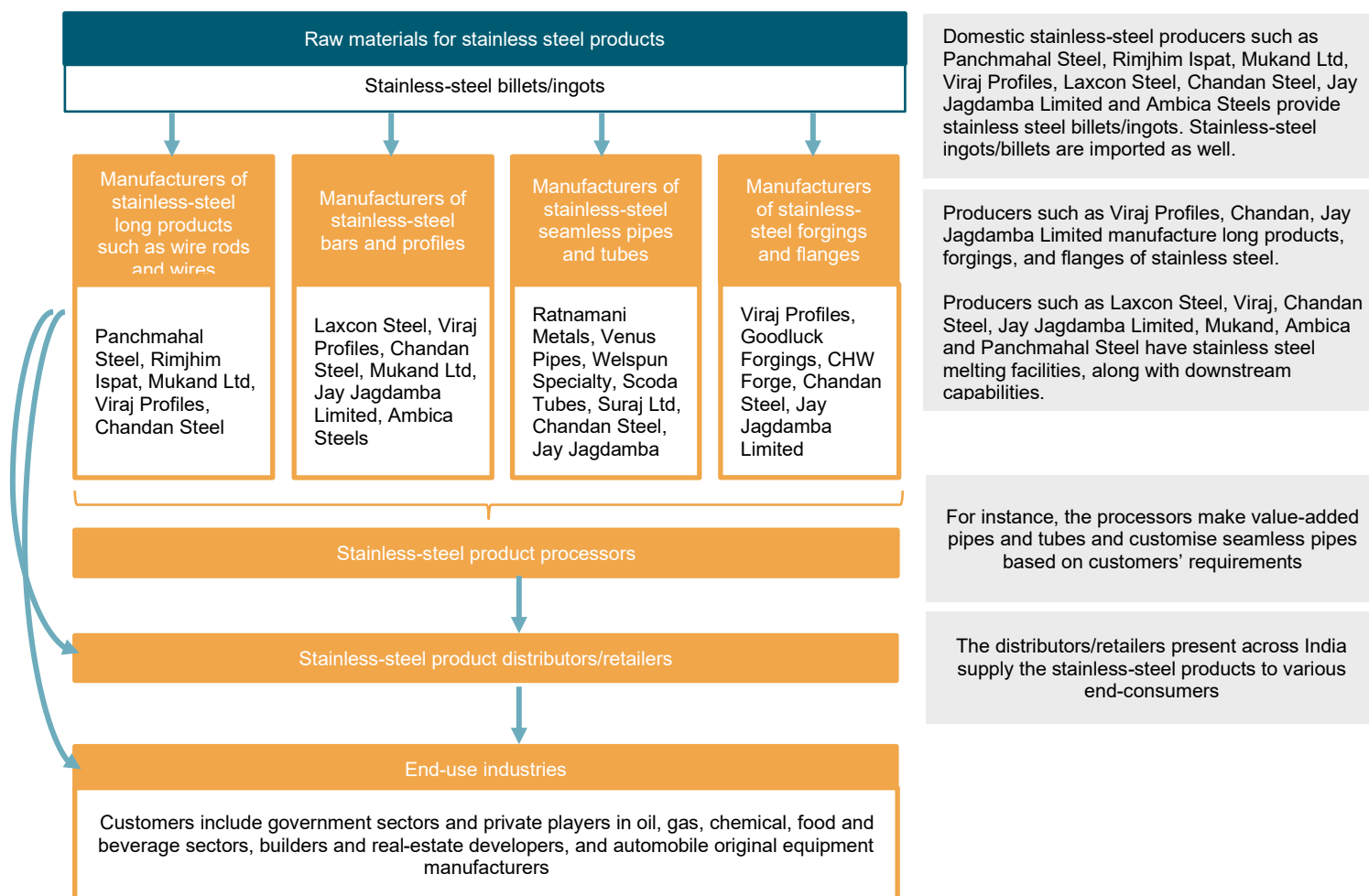
India is a prominent producer of stainless steel. The domestic stainless-steel industry has a healthy mix of large and mid-sized corporates, including public sector and micro, small and medium enterprises (MSMEs), across the country.

Large manufacturers who produce a wide range of stainless-steel long products include Viraj Group, Panchmahal Steel, Ambica Steels, Mukand Ltd, Chandan Steel, Jay Jagdamba Limited, and Laxcon Steels Ltd. Stainless steel flat producers include Jindal Stainless Ltd, Steel Authority of India Ltd (SAIL), Rimjhim Ispat Ltd and Shah Alloys Ltd.

MSMEs mainly have induction-furnace facilities and are primarily in the segment of 'patta', which is a narrow strip of chromium-manganese stainless steel with less than 1% nickel. This industry segment is mainly focused on kitchenware and is highly fragmented, comprising small-scale players, generally located in the northern and western regions of India.

The Indian stainless-steel industry is fully globalised, with large imports and exports of major raw materials and end-products, and with end-product prices driven by both raw-material prices and international prices of stainless steel.

Value-chain analysis of stainless-steel products



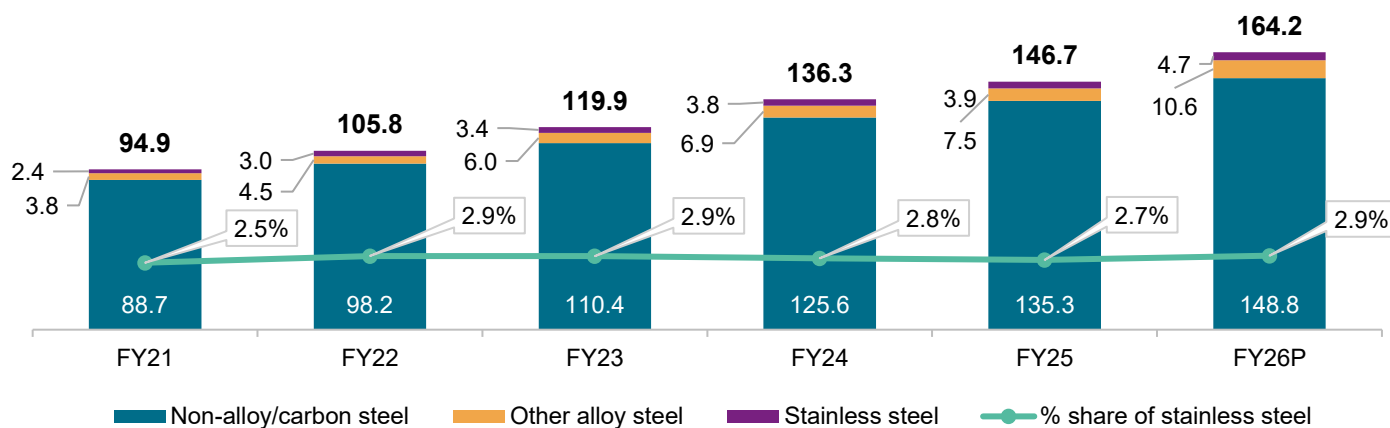
Source: Crisil Intelligence, Industry

Stainless-steel products are manufactured for diverse applications in various industries, as listed below:

Industry	Applications
Automotive	Exhaust systems, fuel tanks and lines, body panels and bumpers, brake components, springs, cables, wire harnesses and piston rods
Food processing machines	Kitchen utensils (pots, pans and cutlery), storage containers and tanks, refrigerators and freezers, food processing equipment (mixers and slicers), conveyors, sieves and filters
Medical and pharmaceutical	Surgical instruments (scalpels and forceps), MRI scanners and sterilisation equipment, hospital furniture (beds and trolleys), medical implants, eyewear frames and teeth braces
Oil and gas	Pipes and valves for drilling rigs, pressure vessels for refineries and offshore platform components
Electronics	Components for devices (housings and connectors), heat exchangers in cooling systems, wire harnesses and antennas
Aerospace	Aircraft components (fittings and fasteners) and engine parts
Marine applications	Shipbuilding materials (hulls and piping), offshore structures, cables and rigging, and boat shafts
Retail products	Kitchenware (cookware and appliances), furniture (tables and chairs), bathroom fixtures (towel racks and sinks), home-decor items (vases and sculptures) and jewellery items
Construction and infrastructure	Handrails and staircases, cladding and roofing materials, bridges and overpasses, decorative elements such as railings and panels, anchors, bolts, tie bars, roof bars and hanger bars, and reinforcing concrete structures with stainless steel wires
Precision machined parts	Pump shafts, cylinder shafts, and other precision machined components used across various industries
Consumer goods	Household appliances, kitchenware, sports and fitness equipment, lunch boxes and bottles, mobile accessories and gadgets, among other items

Stainless-steel industry's position in overall domestic steel demand

India finished steel demand (in million tonnes)



Source: Crisil Intelligence Consulting, industry, Joint Plant Committee (JPC)

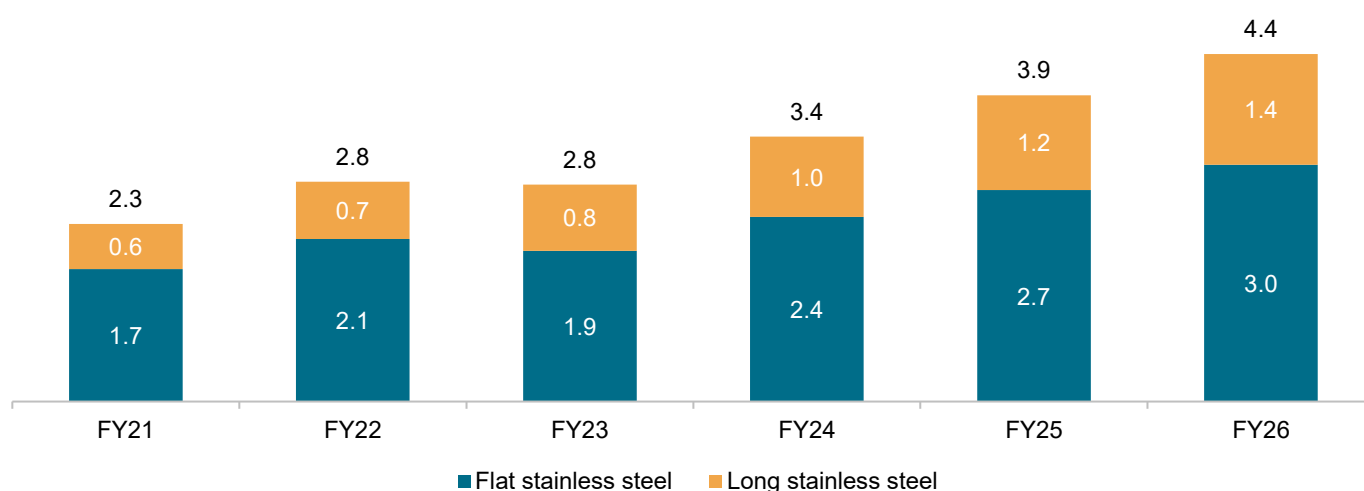
Note: P: Provisional

The domestic demand for stainless steel has remained in the range 2.5-3.0% of the overall domestic demand for finished steel. Although the overall demand for domestic steel clocked a CAGR of 11.5% between fiscals 2021 and 2026, the domestic demand for stainless steel logged a higher CAGR of 14.4% during the same period, primarily due to a strong revival in demand from white goods and consumer durables segment in the post-pandemic fiscals of 2022 and 2023.

Domestic production of stainless steel

Domestic stainless-steel production growth remained flat (2.3 million tonnes) on-year in fiscal 2021 owing to pandemic-led manufacturing disruptions. However, following the resumption of economic activities after the lifting of lockdowns, domestic stainless-steel production volume grew a strong 24% on-year in fiscal 2022 to 2.8 million tonnes. However, the on-year growth remained flat in fiscal 2023 at 2.8 million tonnes. Despite an on-year increase in domestic demand for stainless steel in fiscal 2023, domestic production remained range-bound owing to a strong on-year increase in import volume of stainless steel as a drop in steel prices made imports more attractive. A high base effect and pent-up-demand-led high growth in production in the previous fiscal also contributed to the range-bound production growth in fiscal 2023. However, in fiscal 2024, stainless-steel production increased 22% on-year to 3.4 million tonnes and 15% to 3.9 million tonnes in fiscal 2025. In fiscal 2026, stainless-steel production increased ~13% to 4.4 million tonnes on the back of an increase in domestic demand.

Domestic finished stainless-steel production in million tonnes (FY21-FY26)



Source: Joint Plant Committee (JPC) reports, Crisil Intelligence, industry

Stainless steel bars and rods production split in FY26 (in %)



100%= 1.38 MT

Source: Joint Plant Committee (JPC) reports, Crisil Intelligence, industry

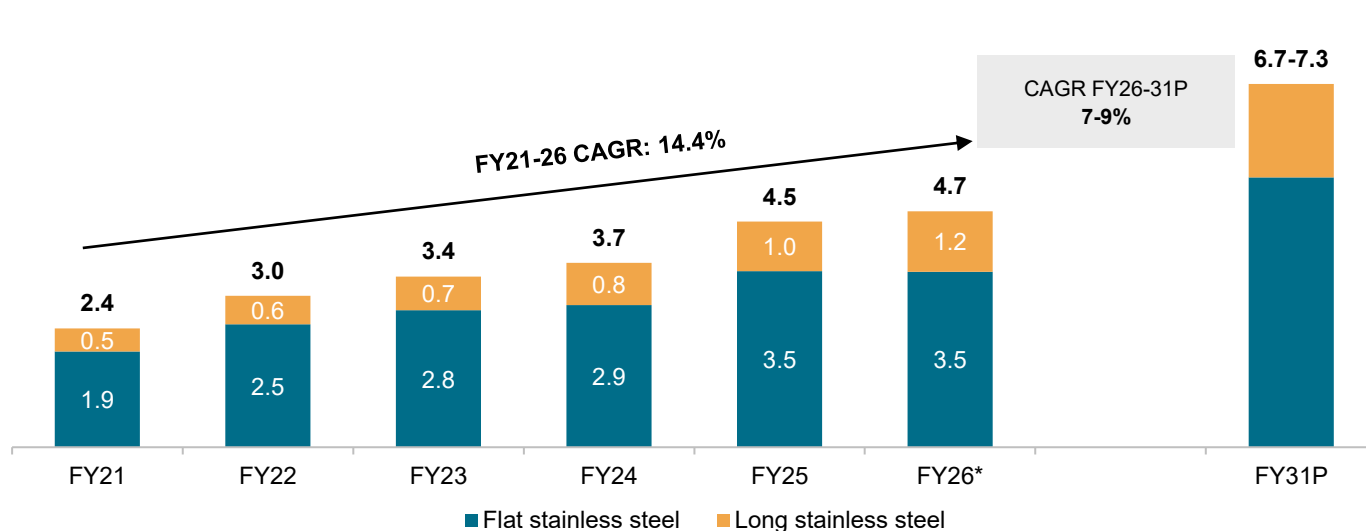
The stainless-steel production landscape is characterised by a pronounced dominance of plain rounds and wire rods, which collectively account for 85% of total production. Wire rods hold a significant share of 54%, while plain rods comprise 31%. In contrast, rebars and others occupy relatively niche positions, with 10% and 5% shares, respectively. The preeminence

of plain rounds and wire rods can be attributed to their extensive applications across diverse industries such as construction and infrastructure, automotive and manufacturing, where their unique properties and versatility are highly valued.

Domestic demand for stainless steel

In fiscal 2021, which was hit by pandemic, stainless-steel domestic demand declined ~12% on-year owing to subdued consumption by key end-use sectors such as consumer durables and construction and infrastructure. However, the demand increased a robust 27% on-year in the following fiscal on account of a revival in consumer demand for white goods and consumer durables and an increase in government-led capital expenditure towards construction and infrastructure development. In fiscals 2023 and 2024, demand increased 13% and 8% on-year, respectively, primarily led by strong on-year demand growth of 19% and 25%, respectively, in fiscals 2023 and 2024, in the long segment of stainless steel due to the government's increased focus on infrastructure development in the run-up to the 2024 general elections. This increase in demand was also supported by the building and construction sector that grew owing to rapid urbanisation, government-led initiatives such as "housing for all", improving consumer sentiment and increasing industrialisation on the back of the government's push for local manufacturing. The overall demand CAGR between fiscals 2021 and 2026 was 14.4%.

Domestic stainless-steel demand (million tonnes)



Source: Joint Plant Committee (JPC) reports, Crisil Intelligence, industry

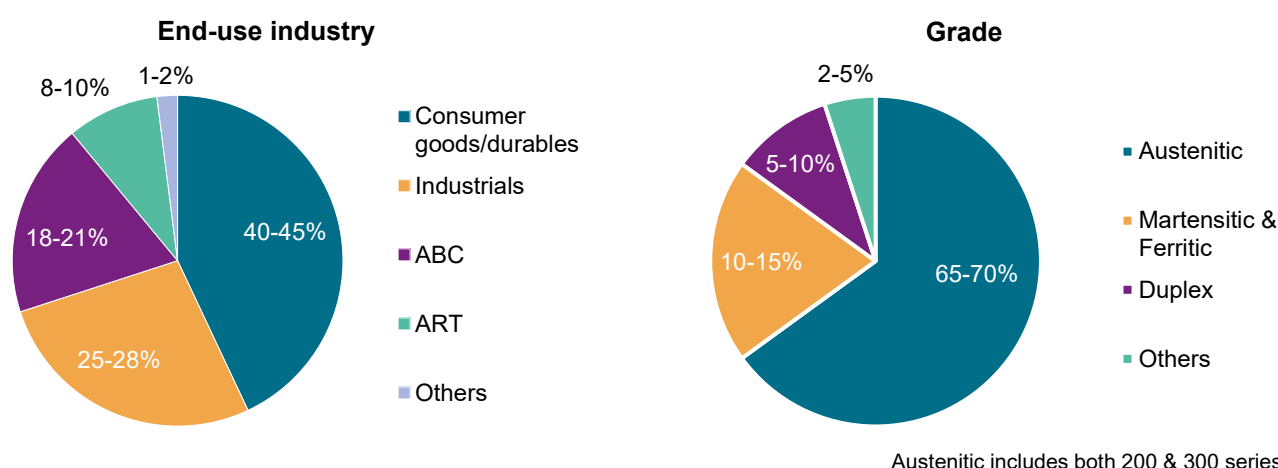
P - Projected, FY26 value is provisional

India continues to be the third largest producer and consumer of stainless steel—after China and Europe—and one of the fastest-growing markets globally. However, its average per-capita consumption was 3 kg in 2024 vs the world average of 6.4-6.5 kg. As one of the largest producers and consumers of stainless steel globally, India has significant growth potential for stainless steel. Domestic stainless-steel demand is expected to clock 7-9% CAGR during fiscals 2026-2031 to 6.7-7.3 million tonnes per annum in fiscal 2031. The major end-use industries expected to support this healthy domestic demand growth include consumer durables, industrials, infrastructure, building, construction and automobile. The growth of the stainless-steel market in India is anticipated to be driven by a combination of factors, primarily led by the increasing emphasis on sustainability and the circular economy, as well as the rising demand for lighter and stronger vehicles. Furthermore, the market is expected to benefit from growing demand from various sectors including consumer goods and durables, such as kitchen appliances, tableware and home decor, as well as the industrial sector. Additional growth drivers include government initiatives such as "Make in India" and "Atmanirbhar Bharat", which aim to promote domestic manufacturing and self-reliance, as well as the expanding middle class and increasing disposable income, which are contributing to rising demand for stainless-steel products. Moreover, the growing awareness of the benefits of stainless

steel, including its durability, corrosion resistance and recyclability, is also expected to drive growth, along with the increasing adoption of electric vehicles and hybrid vehicles, which are poised to become a significant driver of demand for stainless steel in the coming years.

The long stainless-steel market is characterised by a concentrated presence of key manufacturers, with notable companies including Mukand Ltd, Viraj Profiles Pvt. Ltd., Synergy Steel, Sunflag Iron and Steel, Laxcon Steel Ltd, Ambica Steels Ltd and Jay Jagdamba Limited. Collectively, these major players cater to 65-75% of the total market demand. Within this competitive landscape, Jay Jagdamba has established a notable presence, accounting for 5.2% of the market share by sales volume for long stainless steel products in fiscal 2026. This market share underscores the company's position as a significant player in the long stainless-steel market, with a substantial customer base and a reputation for delivering high-quality products.

Stainless steel demand split by industry and grade (%) (FY26)

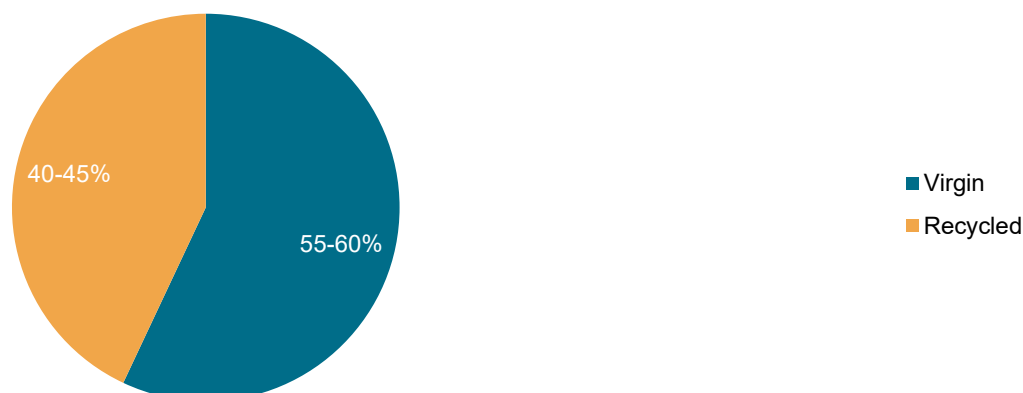


Source: Crisil Intelligence, industry

ABC: Architecture, building and construction; ART: Automotive, railways and transportation

In fiscal 2026, austenitic-grade stainless steel dominated the market, accounting for 65-70% of total demand. Its popularity can be attributed to its exceptional properties such as corrosion resistance, high ductility and formability. Additionally, austenitic steel has high weldability, retains strength at high temperatures and has an attractive appearance, making it ideal for architectural, decorative and food-processing applications. Other grades such as martensitic, ferritic and duplex also have unique properties such as high strength, improved corrosion resistance and weldability. The demand for these grades is as follows: martensitic and ferritic 10-15%, duplex 5-10% and others 2-5%. Overall, the unique properties of each grade drive their demand, with austenitic steel leading the way.

Penetration of recycled stainless steel in the Indian stainless long market (%)

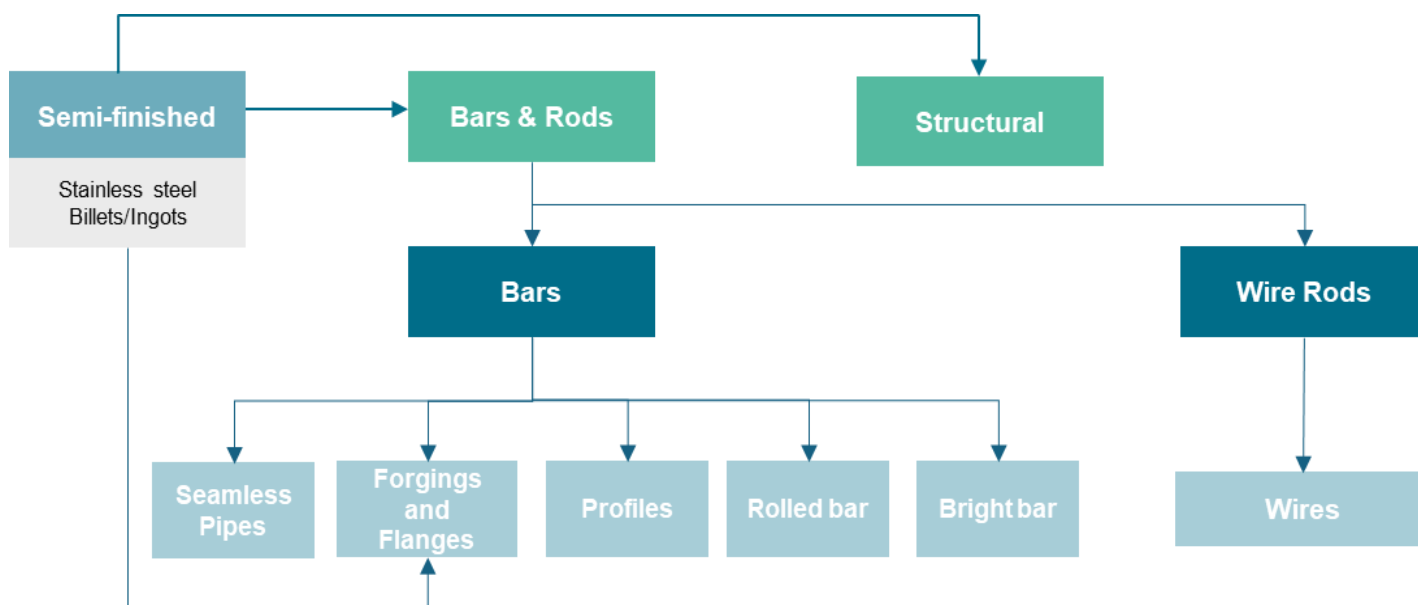


Source: Crisil Intelligence, industry

The stainless-steel industry relies significantly on recycled materials, with 40-45% of the materials used being derived from recycled sources. This substantial proportion is a testament to the industry's commitment to sustainability and reducing its environmental footprint. Recycled stainless steel is highly valued by downstream users due to its retention of the same mechanical properties, strength and corrosion resistance as its virgin counterpart. As a result, it is widely preferred for the manufacture of profiles and other products. The versatility and performance of recycled stainless steel make it an ideal choice for a broad range of applications, with no inherent limitations or restrictions on its use.

The widespread acceptance and adoption of recycled stainless steel underscores the industry's recognition of its value and benefits. By leveraging recycled materials, manufacturers can reduce their dependence on primary resources, lower production costs and minimise their environmental impact. As the industry continues to evolve and prioritise sustainability, the use of recycled stainless steel is likely to remain a cornerstone of its efforts to reduce waste, conserve resources and promote eco-friendly practices.

Demand segmentation by long stainless-steel products

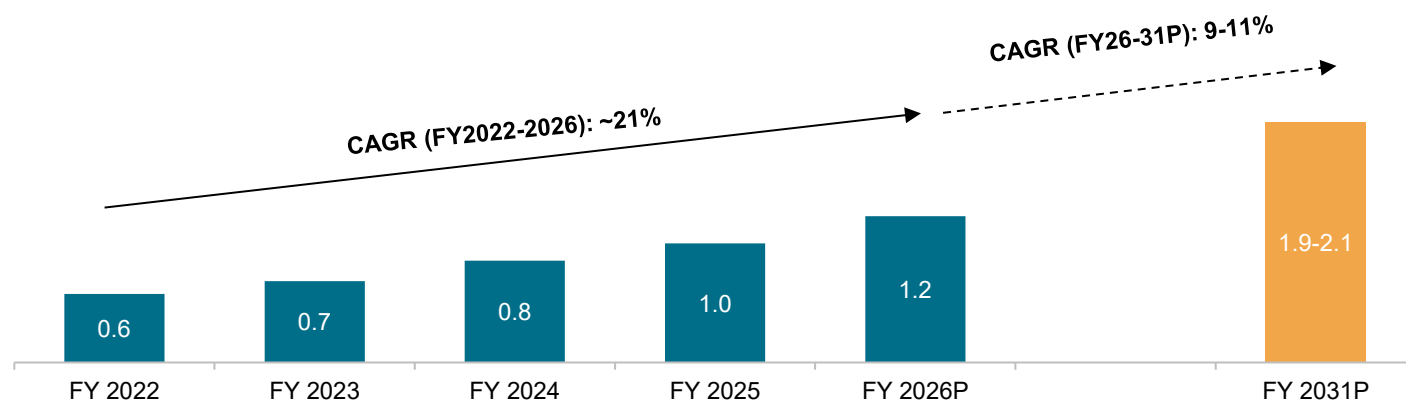


Source: Crisil Intelligence, industry

Stainless-steel long products

Stainless steel long products, including bars, rods and wire rods, play a crucial role in India's industrial landscape. These products find extensive applications across various sectors due to their properties such as corrosion resistance, mechanical strength and durability. In the construction industry, they are used for reinforcement in concrete structures and architectural elements. The automotive sector utilises them for exhaust systems and structural components, benefiting from their high strength-to-weight ratio. In the pharmaceutical and food-processing industries, stainless steel long products are preferred for their hygienic properties and resistance to chemical corrosion. The oil and gas sector relies on these products for pipeline components and offshore structures due to their ability to withstand harsh environments.

Domestic demand for stainless steel long products (in million tonnes)



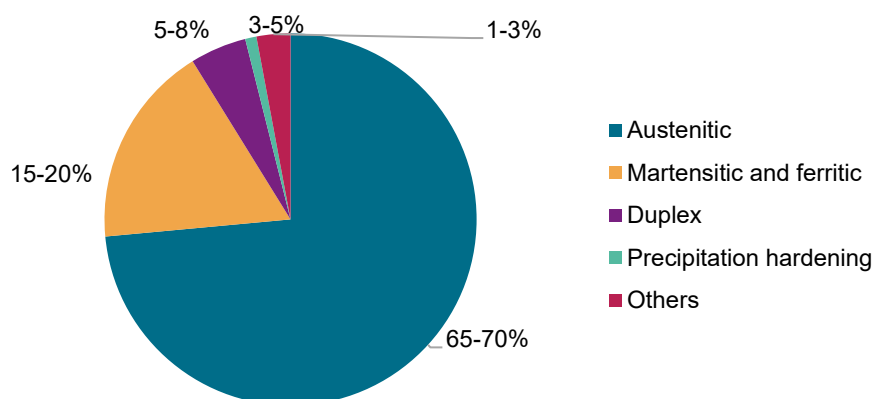
P - Projected

Source: Joint Plant Committee (JPC) reports, Crisil Intelligence, industry

The domestic demand for long form of stainless steel clocked a CAGR of ~21% between fiscals 2022 and 2026 to ~1.2 million tonnes in fiscal 2026. This demand CAGR is significantly higher than that of overall stainless steel owing to an increase in the usage of long form of stainless-steel products in government-led capital expenditure in infrastructure development in the country, especially in fiscals 2023 and 2024, in light of the 2024 general elections.

Going forward, the demand for long form of the stainless-steel segment is expected to clock a 9-11% CAGR, primarily led by key end-use sectors such as ABC and consumer goods.

Stainless steel long products demand split by grade (%) (fiscal 2026)

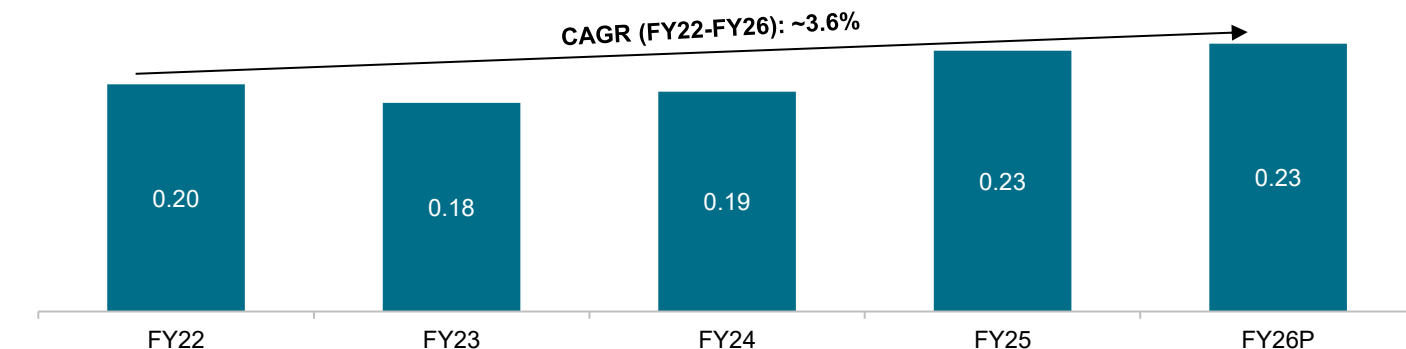


Source: Crisil Intelligence, industry

Demand for austenitic was the highest at 65-70% in stainless steel long products, followed by martensitic and ferritic grade at 15-20%. The usage of the 200 series is very less as they have low nickel content and are remarkably corrosion resistant.

Popular grades used in the 300 series are 304, 316 and 316L. These grades are used in applications where high strength and corrosion resistance are required. They are used in the chemicals, pharma, textiles, and oil and gas industries.

Stainless steel long products exports (million tonne)



P - Provisional

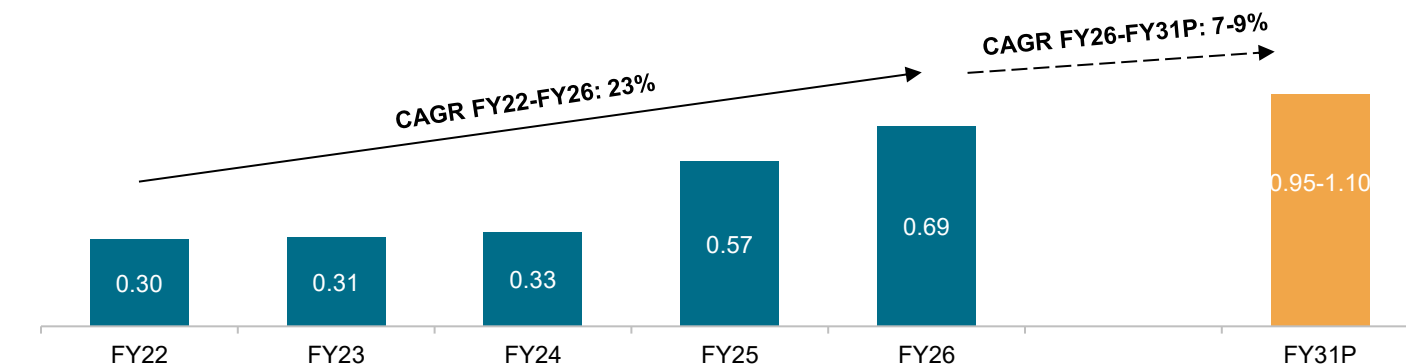
Source: Joint Plant Committee (JPC) reports, Crisil Intelligence, industry

The export volume of the long form of stainless steel increased at a CAGR of ~3.6% between fiscals 2022 and 2026 to approximately 0.23 million tonne in fiscal 2026. After falling to 0.14 million tonnes in fiscal 2021 owing to pandemic-led demand disruptions across the globe, the export volume rebounded in fiscal 2022, clocking an on-year increase of 45%, led by the resumption of economic activities after the pandemic abated.

Stainless steel wire rods

Stainless steel wire rods are versatile semi-finished products with diameters ranging from 5.5 mm to 39.5 mm. Manufactured by hot rolling of billets, these rods serve as raw materials for various downstream products. They are extensively used in the construction, automotive and manufacturing industries due to their excellent corrosion resistance and mechanical properties. Wire rods are used to produce stainless steel wires, fasteners, springs and welding electrodes. The automotive sector uses these rods for components like brake lines and exhaust systems, while the construction industry uses them for concrete reinforcement. With a growing emphasis on quality and durability, stainless steel wire rods continue to play a crucial role in India's industrial landscape.

Domestic demand for stainless steel wire rods (million tonne)



P: Projected

Source: Crisil Intelligence, JPC, industry

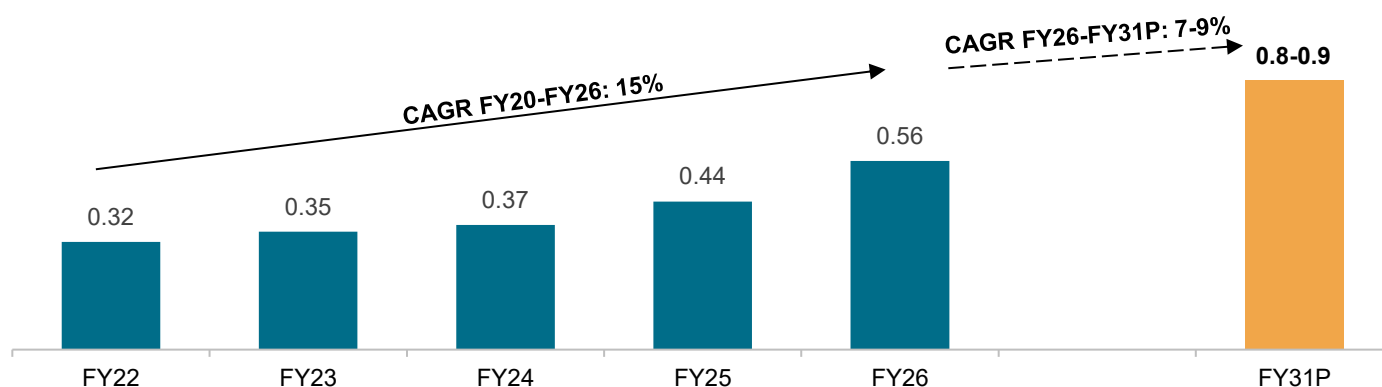
The demand for stainless steel wire rods logged a CAGR of 23% between fiscals 2022 and 2026, owing to fast-paced infrastructure and industrial development during the period, accompanied by strong automobile manufacturing output, especially between fiscals 2024 and 2026. These factors are expected to continue to support demand for stainless steel wire rods in the next five years to 0.95-1.10 million tonnes in fiscal 2031 from 0.69 million tonnes in fiscal 2026, clocking a

CAGR of 7-9% between fiscals 2026 and 2031. The government's increasing focus on the shipbuilding sector is also expected to support demand growth of stainless steel wire rods in the next five years.

Stainless steel wires

Stainless steel wires, derived from wire rods, are essential components in numerous industries. These wires exhibit high tensile strength, corrosion resistance and durability, making them suitable for diverse applications. In the construction and infrastructure sector, they are used for concrete reinforcement and architectural elements. The automotive industry uses stainless steel wires in exhaust systems and structural components. Medical and dental devices, as well as food processing equipment, benefit from the hygienic properties of these wires. The wires' malleability allows for complex shaping and forming procedures, facilitating the manufacturing of precise components.

Domestic demand for stainless steel wires (million tonne)

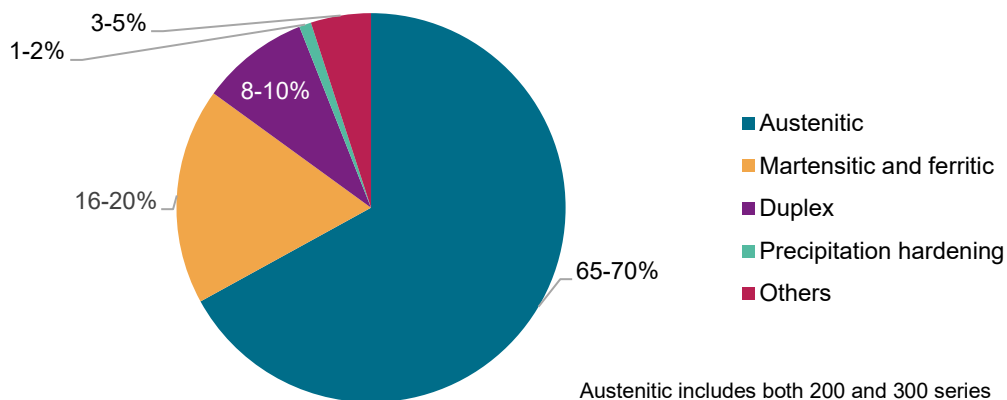


P: Projected

Source: Crisil Intelligence, JPC, industry

Demand for wires is mainly driven by its major end-use sectors such as automotive, construction and infrastructure, electricity and agriculture. Infrastructure has the highest demand for wires, while application in the building and construction industry is currently limited to fencing requirements. The increasing awareness of precast concrete structures will increase the share of the building and construction and infrastructure segments in the future. Further, it is predicted that the automotive segment will clock a CAGR 6-7% over the next five years. This is because of its flexibility, low weight, heat resistance and abrasion resistance.

Wire demand split by grade (%) (fiscal 2026)



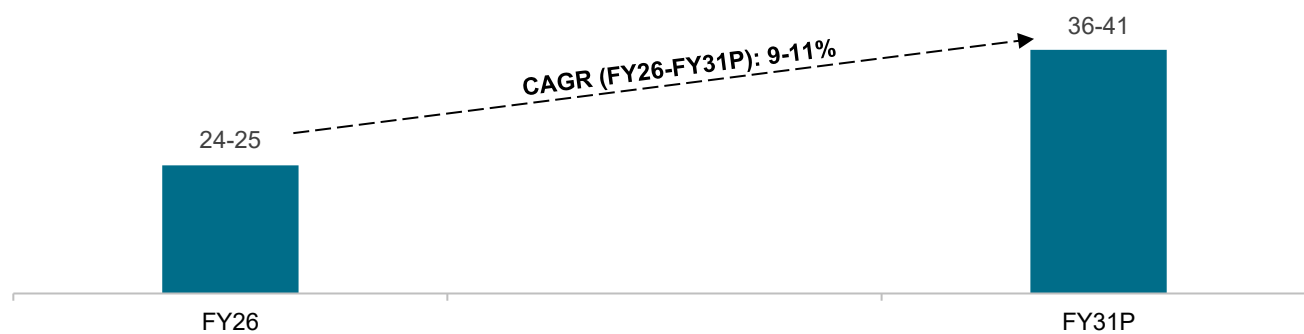
Source: Crisil Intelligence, industry

In the wire segment as well, demand for austenitic grade was the highest at 65-70% in fiscal 2026, the popular grades being 304 and 316. Automotive, aerospace, chemical processing, electronics, machinery, medical, oil and gas were some of the industries using the 300 series stainless wires. Demand for martensitic and ferritic grade came in next at 16-20%.

Stainless steel profiles

Stainless steel profiles, including T-profiles, L-profiles, U-profiles, C-profiles and flats, are structural components widely used in construction and infrastructure. These profiles offer superior strength, corrosion resistance and aesthetic appeal, making them ideal for both functional and decorative applications. In the construction industry, stainless steel profiles are used for framing windows and doors. The automotive sector uses these profiles in vehicle chassis and structural components. Stainless steel profiles are also used in the marine industry for railings and ladders due to their resistance to saltwater corrosion. The versatility of stainless steel profiles, combined with their durability and low maintenance requirements, has led to their increasing adoption in India's rapidly growing infrastructure and construction sectors.

Domestic demand for stainless steel profiles (kilo tonne)



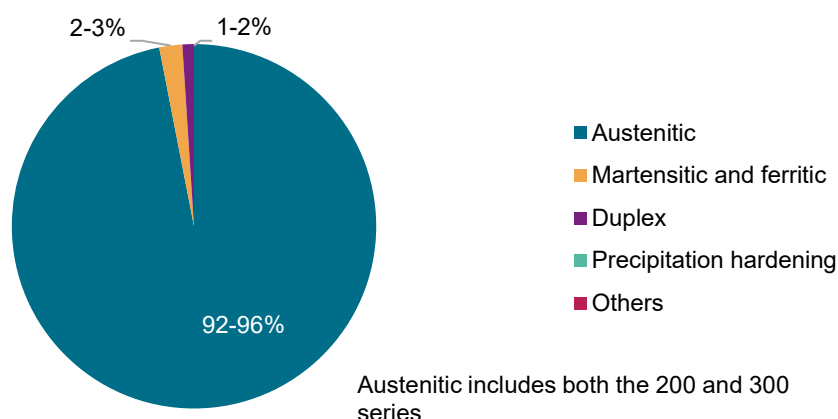
P: Projected

Source: Crisil Intelligence, industry

Stainless steel profiles, including bars, angles, beams and channels, are integral to sectors like construction, automotives, aerospace and manufacturing. Demand for these profiles will increase at a CAGR of ~10% between fiscals 2026 and 2031 and reach 36-41 kilo tonne in fiscal 2031.

Innovations in product offerings and digital transformation are expected to influence the market's growth as it matures. Demand will be driven by growing interest in eco-friendly and sustainable solutions, particularly in industries like manufacturing and healthcare. Industries such as construction, automotive, and energy have been boosting demand for stainless steel profiles.

Profiles demand split by grade (%) (fiscal 2026)



Source: Crisil Intelligence, industry

In profiles, demand for austenitic was the highest in fiscal 2026, with the 202 and 304 grades being the most popular. The SS 304 grade is used for walls, ceilings, tiles, flooring, main doors, interior decoration, bathrooms, etc.

Stainless steel bright bars

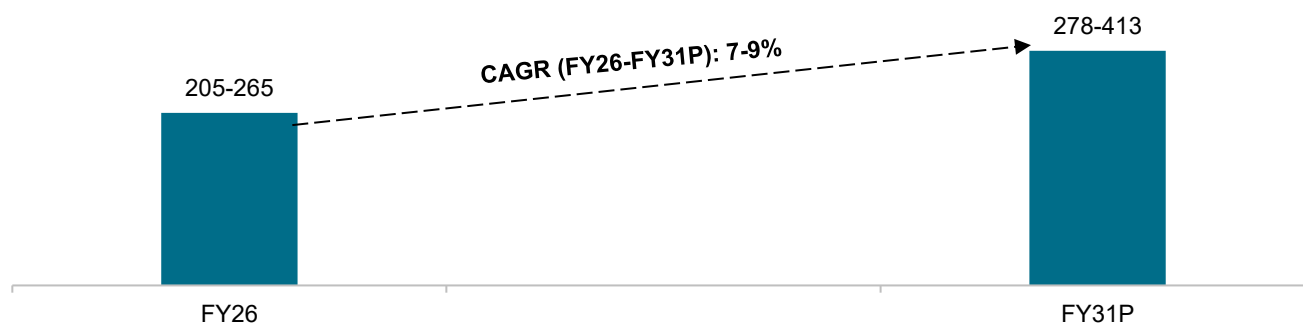
Stainless steel bright bars are a type of stainless steel product that has undergone a process to achieve a high-lustre finish, making them ideal for applications where appearance and corrosion resistance are crucial. These bars are manufactured through a series of processes, including hot rolling, forging and cold drawing, followed by a bright annealing treatment that removes any surface imperfections and imparts a reflective finish. The properties of stainless steel bright bars make them highly sought after in various industries. They possess excellent corrosion resistance due to their chromium content, which forms a protective oxide layer on the surface, shielding the underlying material from corrosive environments. This property, combined with their high strength, durability and ability to withstand extreme temperatures, makes them suitable for a wide range of applications.

One of the primary end-uses of stainless steel bright bars is in the medical industry. Their corrosion resistance and ability to withstand sterilisation processes make them ideal for manufacturing medical equipment, surgical instruments and implants. The food processing industry is another significant consumer of stainless steel bright bars. The non-porous and smooth surface of these bars prevents the accumulation of bacteria and other microorganisms, making them perfect for equipment used in food handling and processing. In addition, the corrosion resistance of stainless steel bright bars ensures that they can withstand the harsh cleaning and sanitising processes used in food processing environments.

The pharmaceutical industry also relies heavily on stainless steel bright bars due to their corrosion resistance and ability to withstand the harsh conditions involved in manufacturing pharmaceuticals. They are used in the production of equipment, such as reactors, tanks and piping, which are used in the synthesis and processing of pharmaceuticals. The smooth finish of these bars also prevents the accumulation of residue, ensuring the purity of the pharmaceutical products.

Apart from these industries, stainless steel bright bars are also used in the manufacture of industrial equipment, such as pumps, valves and fittings. Their high strength, corrosion resistance, and ability to withstand extreme temperatures make them ideal for use in harsh industrial environments. They are also used in the production of architectural features, such as handrails, door handles and other decorative elements, where their bright finish and corrosion resistance provide a durable and attractive appearance.

Domestic demand for stainless steel bright bars (in kilo tonne)

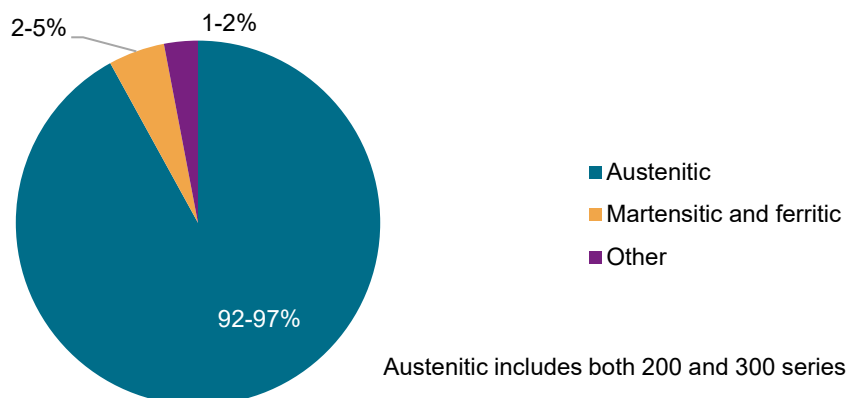


P: Projected

Source: Crisil Intelligence, industry

Domestic demand for stainless steel bright bars is projected to grow to 278–413 kilo tonne by fiscal 2031, logging a CAGR of 7–9%. This growth would be driven by their extensive use in industrial equipment, pumps, valves and fittings due to their high strength, corrosion resistance and ability to withstand extreme temperatures. Stainless steel bright bars are favoured in architectural and decorative applications for their durability and attractive appearance, making them essential across multiple industries.

Stainless steel bright bars demand split by grade (%) (fiscal 2026)



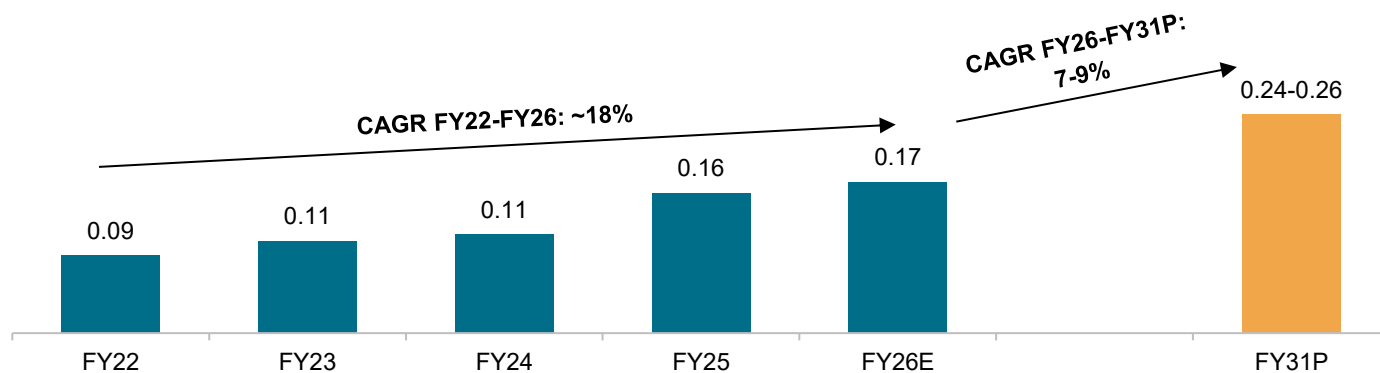
Source: Crisil Intelligence, industry

Austenitic grades, especially 306 and 316L, dominate stainless steel bright bar demand, accounting for 92–97% in fiscal 2026, due to their superior corrosion resistance, strength and versatility. These grades are preferred in industries like chemical processing and machinery, where durability and performance in harsh environments are crucial.

Stainless seamless pipes and tubes

Stainless steel seamless pipes and tubes are critical components in various industries due to their exceptional corrosion resistance, strength and durability. These products are used extensively in the oil and gas, chemical processing and power generation sectors. In the petroleum industry, seamless pipes are employed for extraction, connecting and transporting liquids and gases. The pharmaceutical and food processing industries rely on stainless steel seamless pipes for their hygienic properties and ease of cleaning. The construction sector uses seamless pipes in structural applications, while the automotive industry employs them in exhaust systems and fuel lines.

Domestic demand for stainless steel seamless pipes and tubes (million tonne)



P: Projected, E: Estimated

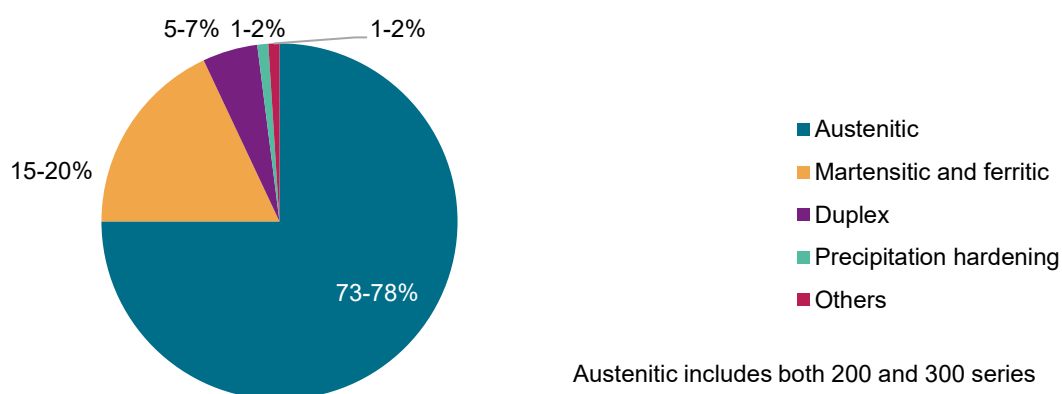
Source: Crisil Intelligence, industry=

Domestic demand for long form of stainless steel seamless pipes and tubes increased at a CAGR of ~18% between fiscals 2022 and 2026 to ~0.17 million tonne in fiscal 2026. Demand grew, primarily on account of higher consumption by key end-use sectors such as oil and gas, automobiles, railways, and transport (ART), and architecture, building and construction (ABC).

In the oil and gas sector, stainless steel seamless pipes and tubes are used mainly for oil drilling and exploration. In the ART sector, these pipes and tubes are used to manufacture various automobile components such as suspension arms, steering rods, etc. These pipes and tubes are used in the ABC segment to provide structural support.

Demand for seamless pipes in India is poised for significant growth, driven by factors such as government initiatives and industry trends. The imposition of anti-dumping duty on Chinese suppliers by the Government of India is expected to boost domestic production, while the requirement of BIS certifications for imported stainless steel mother hollow and seamless pipes will further support the growth of the domestic industry. Additionally, demand for seamless pipes is expected to be driven by the growing needs of various end-use industries, such as the oil and gas, power and chemical sectors, which require high-quality, corrosion-resistant pipes. The automotive and aerospace industries are also expected to contribute to growth in demand, driven by the increasing use of seamless pipes in the manufacture of high-performance vehicles and aircraft.

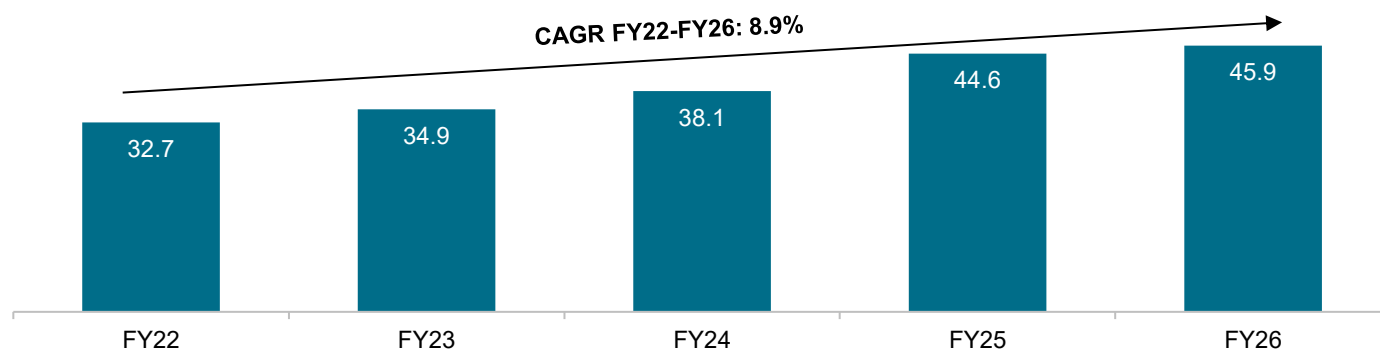
Seamless pipes and tubes demand split by grade (%) (fiscal 2026)



Source: Crisil Intelligence, industry

In seamless pipes and tubes, demand for austenitic grade was the highest, accounting for ~75% in fiscal 2026, where grades 304 and 316 were the most popular. The 400 series of the martensitic and ferritic grade is meant for very special requirements or applications like boilers that need high temperature resistance.

Stainless steel seamless pipes and tubes export (in kilo tonne)



Source: Crisil Intelligence, industry, Ministry of Commerce and Industry

Exports of stainless steel seamless pipes and tubes logged a CAGR of 8.9% between fiscals 2022 and 2026 to 45.9 kilo tonnes in fiscal 2026. During this period, exports grew strongly on-year by 17.1% in fiscal 2025 owing to stronger demand from overseas infrastructure and industrial projects, followed by a lower 3.0% growth in fiscal 2026 as the market consolidated after the spike in the previous fiscal.

The more prominent types of seamless pipes are:

Titanium seamless pipes and tubes

Titanium seamless pipes and tubes are highly versatile and widely used in various industries, including aerospace, chemicals and petrochemicals, oil and gas, marine, medical and power generation, due to their exceptional properties. Composed primarily of titanium with alloying elements like aluminium, vanadium and molybdenum, these pipes and tubes exhibit a high strength-to-weight ratio, corrosion resistance and biocompatibility, making them ideal for demanding applications. Some grades include commercially pure (CP) titanium, such as Grades 1-4 (99-99.9% Ti), and alloyed titanium, including Grade 5 (Ti-6Al-4V), Grade 7 (Ti-0.2Pd), Grade 9 (Ti-3Al-2.5V), Grade 12 (Ti-0.3Mo-0.8Ni), Grade 19 (Ti-3Al-8V-6Cr-4Mo-4Zr) and Grade 23 (Ti-6Al-4V ELI). These seamless pipes and tubes are particularly suited for aircraft components, medical implants and high-pressure piping systems, where their excellent corrosion resistance and durability ensure reliable performance in harsh environments, making titanium seamless pipes and tubes a preferred choice for industries where safety, strength and longevity are critical. Some applications for them include:

Industry	Application	Properties
Aerospace	Hydraulic systems, engine components	High strength, heat resistance, lightweight
Chemical processing	Heat exchangers, reactors	Superior corrosion resistance
Marine	Offshore platforms, desalination pipes	Corrosion resistance
Medical	Surgical implants, prosthetics	Biocompatibility
Power generation	Condenser tubes, geothermal systems	Resistance to scaling

Source: Crisil Intelligence, industry

Nickel alloy and superalloy seamless pipes and tubes

Nickel alloy and superalloy seamless pipes and tubes are engineered for extreme environments, valued for their exceptional combination of corrosion resistance, mechanical strength and durability at elevated temperatures. Their composition centres on high levels of nickel—typically over 50%—often alloyed with elements such as chromium, molybdenum, iron, copper, cobalt and tungsten. For example, common nickel alloys blend nickel with chromium and molybdenum to deliver outstanding chemical stability in corrosive acids, while superalloys further incorporate elements like cobalt and aluminium to dramatically improve high-temperature performance, creep resistance and surface stability. Notable superalloys may include precipitation-hardened phases for enhanced strength and oxidation resistance up to and beyond 1,000°C. Superalloys, in particular, are designed for excellent creep resistance and surface stability under cyclic loading and thermal stress.

Popular grades include Nickel 200/201, alloy 600, 601, 625, 718, 725, X-750, 800/HT, 825, C-276, C-22, B-3. With their unique combination of strength, corrosion resistance and high-temperature performance, nickel alloy and superalloy seamless tubes are foundational to the reliability, efficiency and longevity of advanced technological systems across modern industry, driving innovation and excellence in various critical applications. Some applications include:

Industry	Application	Properties
Chemical processing	Reactors, heat exchangers, process piping	Exceptional resistance to acids and corrosive chemicals; maintains strength and stability in aggressive environments
Oil and gas	Subsea piping, flare stacks	High resistance to sour gas, chloride-induced corrosion and stress cracking at high pressures and temperatures
Power generation	Boiler tubes, nuclear coolant piping, combustion liners	Thermal stability, oxidation and creep resistance under prolonged high-temperature service; resistance to scaling and pitting
Marine	Seawater piping, propeller shafts, desalination plants	Superior resistance to seawater, brine and marine atmospheres; excellent toughness and anti-fouling properties

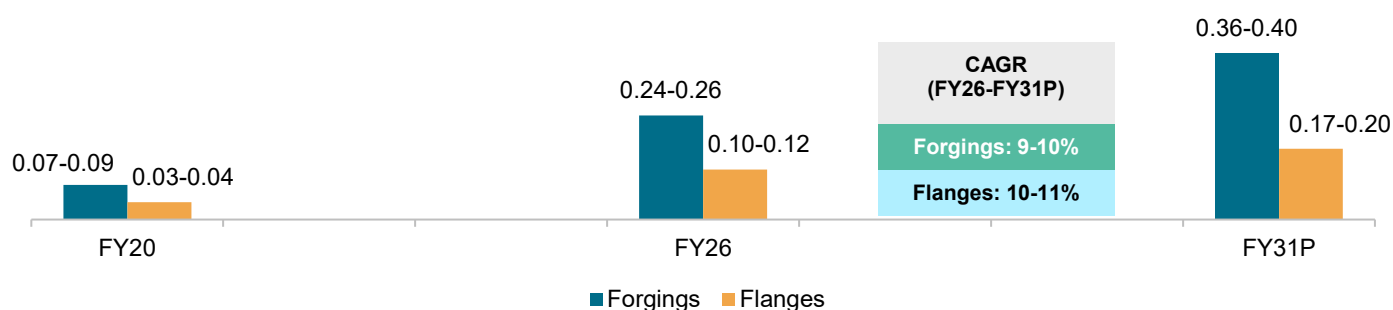
Industry	Application	Properties
Aerospace and defence	Jet engine turbines, exhaust systems, fasteners	Superior tensile and fatigue strength at elevated temperatures, oxidation resistance and stability under cyclic thermal loads

Source: Crisil Intelligence, industry

Stainless steel forgings and flanges

Stainless steel forgings and flanges are integral components in piping systems across various industries. Forgings offer superior strength and dimensional accuracy, making them ideal for high-stress applications. Flanges, a type of forged product, are used to connect pipes, valves and equipment in piping systems. In the chemical and petrochemical industries, stainless steel flanges are crucial for handling corrosive substances and withstanding high pressures. The oil and gas sector uses these components in offshore platforms and refineries.

Domestic demand for stainless steel forgings and flanges (million tonne)

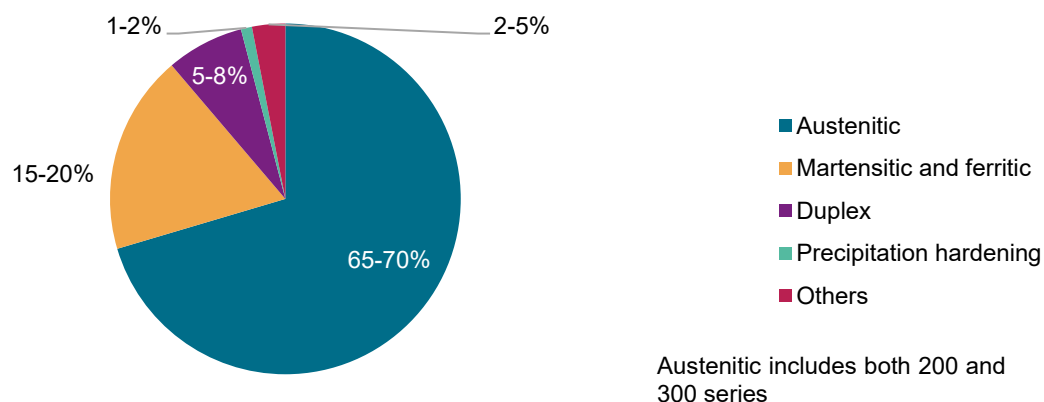


P – Projected

Source: Crisil Intelligence, industry

Domestic demand for stainless steel forgings and stainless steel flanges was 0.24-0.26 million tonne and 0.10-0.12 million tonne, respectively, in fiscal 2026. These are expected to log a CAGR of 9-10% and 10-11%, respectively, between fiscals 2026 and 2031, to reach 0.36-0.40 million tonnes and 0.17-0.20 million tonnes, respectively, in fiscal 2031. Growth in both these segments is expected to be driven by a gradual shift from conventional steel to stainless steel, especially in the automobile industry, their increasing usage in the food, chemical and related industries; and increasing focus on development of the oil and gas industry in the country.

Forgings and flanges demand split by grade (%) (fiscal 2026)

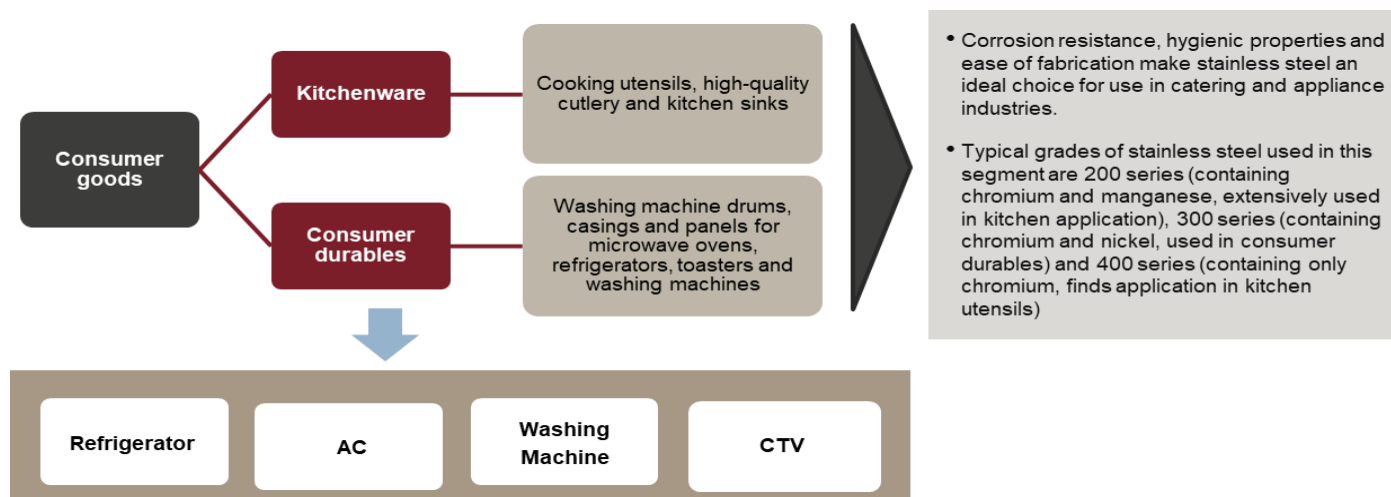


Source: Crisil Intelligence, industry

Demand in forgings and flanges was the highest for the austenitic grade, accounting for 65-70% of demand in fiscal 2026, with 304 and 316 being the most popular grades. Other grades used in the 300 series were 316L, 321, 347, 304H and 316T. This was followed by martensitic and ferritic grades that accounted for 15-20% of the demand. Popular grades in forgings and flanges were 410, 415, 420 and 431.

Application mapping across end-use industries

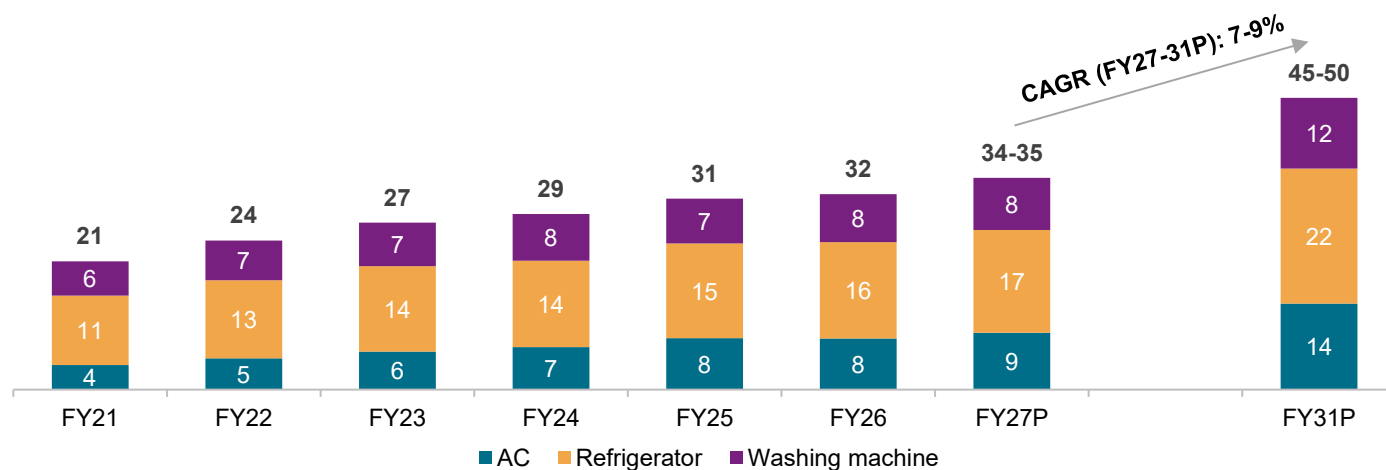
Consumer goods sector



Source: Crisil Intelligence, industry

The consumer goods sector, which broadly includes the kitchenware and consumer durables categories, accounts for the highest share in demand for stainless steel in India (40-45% as of fiscal 2026). Kitchenware includes cooking utensils, high-quality cutlery and kitchen sinks, and consumer durables includes washing machine drums, casings and panels for microwave ovens, refrigerators, and air conditioners (ACs). The consumer durables sector is expected to clock a CAGR of 7-9% between the fiscals 2027 and 2031 on account of increasing urbanisation, an expanding e-commerce market and rising disposable income of consumers.

Consumer durables growth trend (In million units)



P: Projected

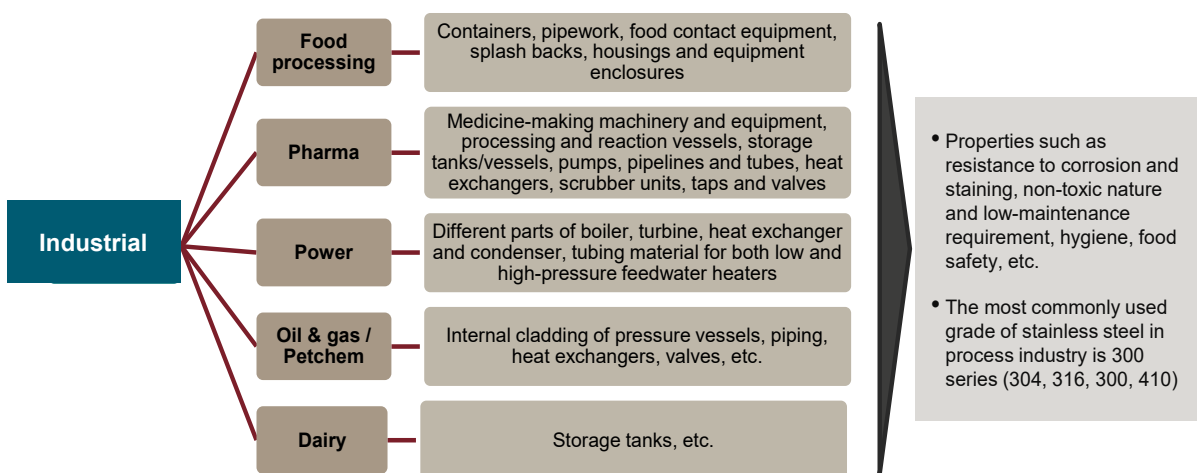
Note: The number above each bar in the graph represents total volume sale of consumer durables for that fiscal

Source: Crisil Intelligence, industry

Emerging applications in consumer durables: Black stainless steel, produced using black nano powder and anti-finger coating, is used in premium applications. Further, energy storage systems in smart homes are increasingly utilising stainless steel.

Industrial sector

The industrial sector, primarily comprising the chemical and oil and gas industries, accounts for 25-28% of domestic demand for stainless steel. As these industries operate in harsh environments, stainless steel—a highly corrosion-resistant and chemical-resistant material—is extensively used in manufacturing machinery, valves, pipes and tanks. The expected expansion of industrial capacity, driven by the government's push for localised manufacturing, thereby supporting growth in demand for stainless steel.



Source: Crisil Intelligence, industry

Oil and gas and petrochemicals

In fiscal 2026, domestic petrochemical demand is estimated to have grown at a slower pace of 1-3% on-year. Supply-chain disruptions in March amid the West Asia conflict led to raw material shortages at both gas- and naphtha-based steam crackers, reducing consumption of basic chemicals and final products. Weak demand for certain polymers (HDPE, PS and PVC) further subdued growth, largely due to extended monsoon conditions that dampened demand for irrigation-related products and cooling appliances such as ACs and refrigerators.

In fiscal 2027, petrochemical demand is expected to grow a moderate 3-5% on-year, primarily held back by supply disruptions in the initial quarters. Demand is expected to clock a CAGR of 7-9% between fiscals 2026 and 2031, compared with ~6% over the past five years, driven by end-use sectors such as automobile, infrastructure, industrial, packaging, irrigation and construction as a growing population and rising income levels increase consumption.

Power

In fiscal 2026, power demand is estimated to have increased 1-1.5% on-year to 1,705-1,715 BU, driven by steady economic performance and increasing disposable income, partly offset by unfavourable weather conditions. Power demand is expected to increase 5.5-6.5% on-year in fiscal 2027, owing to weather volatility and buoyant economic conditions. Between fiscals 2027 and 2031, demand is expected to log a CAGR of 5-7% on the back of healthy economic growth and expansion of the power footprint via strengthening of distribution infrastructure. The central government's major reforms for improving

the overall health of the power sector, particularly that of state distribution utilities, are expected to improve the quality of power supply, thereby supporting power demand.

The power sector's growth is expected to drive stainless steel demand in India. As power demand increases 5.5-6.5% on-year in fiscal 2027 and logs a CAGR of 5-7% between fiscals 2027 and 2031, stainless steel products used in power generation, transmission, and distribution infrastructure will be in high demand. Specifically, stainless steel pipes, tubes and fittings, as well as grades such as 304, 316 and 410, will be sought after due to their resistance to corrosion and high temperatures. Renewable energy applications, such as solar and wind power, will also drive demand for stainless steel alloys. This growth will present opportunities for the stainless steel industry, driven by the expansion of power infrastructure and integration of renewable energy sources.

Pharmaceuticals

India is a prominent and rapidly growing manufacturer of pharmaceutical products. It is the largest provider of generic medicines globally. The Indian pharmaceutical industry includes a network of over ~3,000 drug companies and ~10,500 production units.

These manufacturing units require equipment made of materials that should not react with the active materials used during the manufacturing process. Hence, stainless steel is a popular choice for such applications. The two main grades of stainless steel used in the industry are 304 and 316. Grade 316 is more resistant than 304 against acid and base attacks. Grade 316 is used to construct equipment that is subjected to direct contact with chemicals, while grade 304 is used for other applications. In the pharma equipment industry, 80-90% of stainless steel is used in medicine-making machinery and equipment, whereas the remaining is consumed in packaging machinery and utilities. Investments in the pharma sector is expected to increase on account of rising disposable income, healthcare awareness, medicine availability, exports opportunity and penetration of health insurance. Apart from this, the government's Production Linked Incentive (PLI) scheme and the development of bulk drug parks to promote the Indian bulk drug industry, including providing manufacturing incentives, are likely to aid growth in the long term. The government's measures to incentivise the production of active pharmaceutical ingredients (APIs) and key starting materials (KSMs) under the 'Make in India' programme and schemes such as the Cluster Development Programme for Pharma Sector (CDP-PS) are also expected to support demand for stainless steel in India.

Chemical Industry

Demand for stainless steel in the chemical industry is driven by the need for equipment that can withstand exposure to corrosive substances such as acids, solvents, chlorides, and caustic chemicals, as well as operate reliably under elevated temperatures. Round bars, flats, rods, channels, and angles are used in agitator shafts, pump shafts, valve stems, fasteners, reactor internals, platforms, pipe racks, and structural supports around process equipment. Grades such as 304/304L may be used in mild environments, while 316/316L is widely specified where improved chloride resistance is required. Duplex and super duplex grades are selected for more severe chloride-bearing or acidic service. Stainless steel helps reduce corrosion-related downtime, lower contamination risk, and extend service life in chemical plants producing fertilizers, polymers, solvents, acids, and specialty chemicals.

Data Centres

The data centre industry in India is growing steadily with total data centre capacity in India increasing from about 375 MW in 2020 to around 1,500 MW in 2025 and is projected to grow to 6,500 MW by 2030.⁸ Stainless steel products have a selective but growing role in data centres, mainly in support systems where corrosion resistance, cleanliness, and long service life are valued. Bars, angles, channels, rods, and threaded products are used in cable tray supports, raised-floor frameworks, equipment mounting frames, pipe hangers, cooling-water skids, pump supports, and backup power

⁸ Press Information Bureau (PIB);

infrastructure. Data centres increasingly use chilled-water and liquid-cooling systems, where stainless steel grades such as 304 and 316 may be used in areas exposed to condensate, treated water, or humid operating conditions.

Marine Industry

Marine and offshore environments generate sustained demand for stainless steel products due to the highly corrosive effects of saltwater and salt-laden atmospheres on conventional materials. Stainless steel bars, rods, angles, flats, and channels are widely used in critical applications such as propeller shafts, pump shafts, deck fittings, ladders, railings, fasteners, mooring systems, anchor hardware, and structural components for offshore platforms. Grade 316/316L is the most commonly specified material for general marine applications because its molybdenum content enhances resistance to pitting and crevice corrosion in chloride-rich environments. For more demanding conditions requiring greater strength and superior resistance to localized corrosion, duplex stainless steels are increasingly preferred. Demand from this segment is supported by ongoing investment in shipbuilding and vessel maintenance, port infrastructure, coastal construction projects, offshore oil and gas facilities, and the expanding offshore wind energy sector.

Mining and Cement Industry

Abrasive materials, elevated temperatures, dust and corrosive processing conditions influence material selection in mining and cement operations. Stainless steel products are used in applications such as conveyor systems, screens, chutes, crusher-area components, kiln-related structures, fasteners, platforms, hoppers, and wet-processing equipment. Their use is typically concentrated in areas where corrosion resistance, heat resistance, or reduced maintenance requirements justify a higher material cost. While carbon steel remains the dominant material for large structural applications, stainless steel is often specified for components exposed to process water, chemicals, abrasive slurries, high humidity, or elevated temperatures that can accelerate degradation and increase maintenance frequency. Key demand areas include mineral processing circuits, tailings handling systems, slurry transport equipment, dust-collection systems, cement plant processing equipment, and maintenance-intensive plant locations where equipment reliability and service life are important considerations.

Water Treatment Plants

Water and wastewater treatment facilities have many components that operate in continuously wet, corrosive, or chemically treated environments and are expected to deliver long service lives with minimal maintenance. Stainless steel products are used in applications such as screen bars, sludge scraper shafts, clarifier mechanisms, pump shafts, pipe supports, grating systems, handrails, brackets, fasteners, and structures supporting chemical dosing and treatment equipment.

Grade 304 is widely used in freshwater and less aggressive service conditions, particularly for above-water and indoor applications. Where chloride levels are higher such as in coastal treatment plants, desalination facilities, chlorinated water systems, and submerged equipment grade 316/316L is generally preferred because of its enhanced resistance to pitting and crevice corrosion. In particularly demanding environments, duplex stainless steels, including Grade 2205, are increasingly adopted due to their higher strength and superior resistance to chloride-induced corrosion.

Heat Exchangers and Boilers

Heat exchangers and boilers use stainless steel products in components that must retain mechanical strength under heat, pressure, and corrosive service conditions. Round bars, rods, flats, and profiles are used for tie rods, stay rods, baffles, tube supports, shafts, fasteners, frames, and internal support structures. Austenitic heat-resistant grades such as 304H, 316H, 321, 347, and 310 are selected depending on operating temperature, oxidation risk, and process media. Stainless steel is common in refinery, petrochemical, power generation, food processing, pharmaceutical, HVAC, and industrial boiler systems. Long products are often used alongside stainless plate, sheet, pipe, and tube, making their demand closely tied to fabrication of pressure equipment and heat-transfer assemblies.

Food processing and dairy industry

Stainless steel demand from the food processing and dairy industry can be grouped under three broad categories:

- Processing machinery and equipment
- Packaging machinery and equipment
- Utilities (include all other machinery and equipment used to clean/ purify air, water, etc.)

In the food processing and dairy industry, stainless steel is used in parts that come directly into contact with food. The industry prioritises equipment reliability and product purity. To meet these requirements, stainless steel is often the material of choice for process equipment. The main reasons for its widespread use include its corrosion resistance, durability, heat resistance, ability to protect flavour and colour, and ease of cleaning.

Emerging applications in industrials: The industrial sector has numerous applications for stainless steel in various industries, including pharmaceuticals, industrial machinery (mining, garbage truck hoppers, concrete mixers and urban waste sorting containers), and food and beverage (food processing, dairy and meat production, solar dryers, mobile kitchens, biomass stoves and pot skirts).

Defence and aerospace sector

The Indian stainless steel industry is poised for significant growth with increasing demand from the defence and aerospace sector. The recent allocation of Rs 7.85 trillion for the Ministry of Defence (MoD) in the Union Budget 2026-27 is expected to boost demand for stainless steel products, including armour plates, naval vessels and equipment. Specifically, grades such as 304, 316, 410 and 17-4PH are anticipated to be in high demand due to their exceptional strength, corrosion resistance and durability. Additionally, specialised grades such as Duplex 2205 and Super Duplex 2507 are likely to see increased demand due to their superior resistance to corrosion and high-temperature applications.

Furthermore, India's expanding space exploration programmes, led by the Indian Space Research Organisation (ISRO), also contribute to demand for stainless steel, particularly for satellite launch vehicles. In aerospace, demand for stainless steel is driven by its critical applications in manufacturing aircraft components, such as fuel tanks, landing gear, engine parts and exhaust systems, where high-temperature resistance and lightweight properties are essential. In defence, stainless steel is used in armoured vehicles, naval ships, missiles and ammunition storage due to its ability to withstand harsh environments. As the defence and aerospace sector expands, the stainless steel industry is expected to benefit from increased consumption, particularly for high-grade alloys tailored to meet stringent performance requirements.

Architecture, building and construction (ABC) sector



Source: Crisil Intelligence, industry

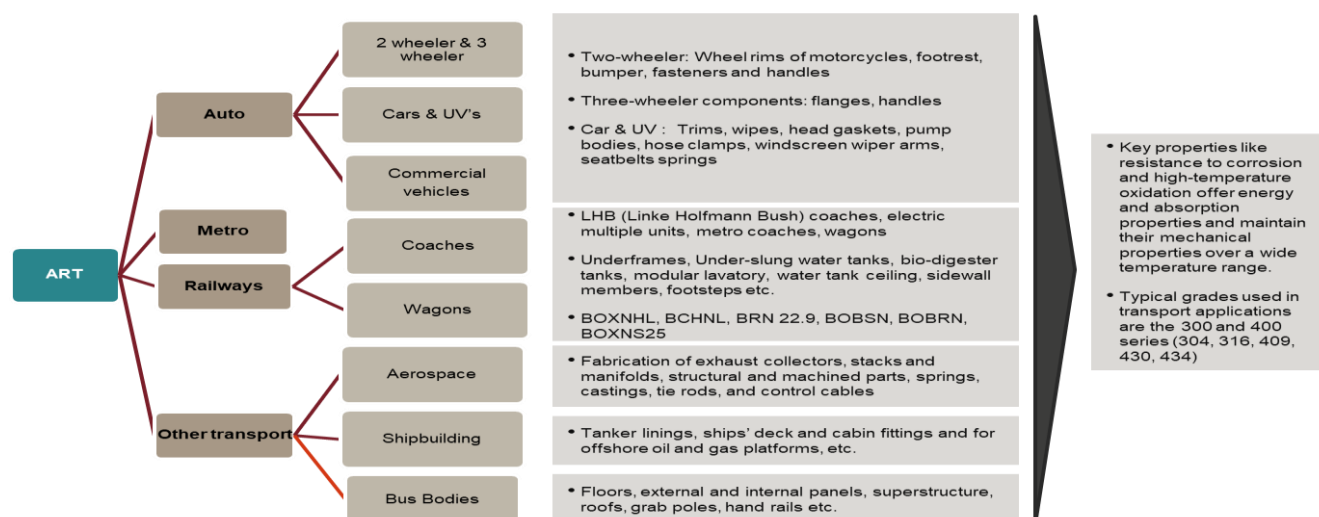
Stainless steel is used in manufacturing various load-bearing components in pedestrian channels, roads and railway bridges in the infrastructure segment. Due to its high strength, flexibility and resistance to corrosion, stainless steel is also used in the building and construction segments, primarily in manufacturing cladding in the exterior of buildings as well as interior

applications like handrails and countertops. The ABC sector is expected to log a CAGR of 6-8% between fiscals 2026 and 2030, driven by the government's strong push towards infrastructure development through schemes such as the National Infrastructure Pipeline (NIP) and 'Housing for All', as well as rising disposable incomes, increasing urbanisation, and easier financing options.

Emerging applications in the ABC sector: Stainless steel is increasingly being used in construction projects such as stadiums, hotels, buildings, structural art and design constructions, airport infrastructure, and high-end interior design. These emerging applications are expected to boost demand for stainless steel in this sector.

Automobile, railway and transportation (ART) sector

Stainless steel is used in manufacturing various automobile components in conventional, hybrid and electric vehicles, including exhaust systems, heat exchangers, pipes and tubes, fasteners, transmission systems, and some components of skin panel. With the increasing focus of automobile companies on making fuel-efficient conventional vehicles and high-range electric vehicles, stainless steel—due to its high strength-to-weight ratio—is increasingly being used to reduce weights of vehicles. Further, owing to its longevity and durability, stainless steel is used in making fasteners, electric systems and other key components in trains. Growth in automobile production, expected at a CAGR of 6.5% over the next five fiscals, will support higher demand for stainless steel.



Source: Crisil Intelligence, industry

Automobile sector

As of 2025, India was the third largest automobile market in the world in terms of sales. The country's automobile sector accounted for 3.8% of the total FDI inflow in calendar year 2025, as per a DPIIT report. The industry is expected to grow, led by small cars, compact utility vehicles (UVs) and two-wheelers. Rising middle-class incomes and a young population are expected to drive demand, along with increased urbanisation, an expanding working population and easy access to finance.

Emerging applications in the ART sector: Stainless steel is finding applications in new automobiles, batteries, electric vehicles and railways due to its lower lifecycle cost, light weigh, corrosion resistance and long-term reliability. The Vande Bharat Express, a medium-distance super-fast train, has wagons and coaches made from 300 series grade stainless steel.

Luxury Vehicle Parts

Unlike mass-market vehicles, where material choice is largely cost and volume driven, premium vehicles use stainless steel in applications where finish, durability, dimensional accuracy and long-term appearance are important. Stainless steel bars, rods, wire and precision profiles are used in premium exhaust hangers and supports, decorative hardware, seat mechanisms, high-strength fasteners, steering linkages and selected suspension-related components. The material is particularly relevant in exhaust and underbody parts exposed to heat, road salt, moisture and vibration. As luxury vehicle sales and premiumisation trends grow in India, demand may increase for stainless components with tighter tolerances, better surface finish and longer service life.

Demand support from potential advantages of using stainless steel

Demand for stainless steel will continue to be supported by the numerous advantages it offers compared with other materials across end-use industries.

Highly corrosion resistant

This property gives stainless steel longevity and durability in challenging environments, making it ideal for applications in the marine, chemical processing, and oil and gas industries, where exposure to harsh conditions is common.

Hygienic and easy to clean

This inherent property makes stainless steel indispensable in the consumer goods and food and beverage sectors, ensuring product purity and safety.

Aesthetic, sustainable and low maintenance

These properties make stainless steel a popular choice in interior design and building facades. Further, its high recyclability makes it a sustainable and eco-friendly material compared with its alternatives.

High strength-to-weight ratio

Stainless steel has a high strength-to-weight ratio, making it particularly appealing in the automotive and transportation sectors, where it helps reduce fuel consumption and minimise environmental impact. This property also makes stainless steel a popular choice in interior design and building facades.

High-temperature resistance

Stainless steel's high-temperature resistance supports its demand in industries such as chemical processing, oil and gas, and power generation. Its ability to withstand extreme temperatures makes it ideal for equipment and components, such as heat exchangers, reactors and pipes. This reduces maintenance and replacement costs, thereby driving demand for stainless steel in these sectors.

High-pressure resistance

Stainless steel's high-pressure resistance drives its demand in industries such as oil and gas, chemical processing, and power generation. Its ability to withstand high pressures makes it suitable for equipment and components, such as pipelines, valves and fittings. This reduces the risk of equipment failure and downtime, thereby increasing demand for stainless steel in these industries.

New developments and technologies driving demand

Sustainability and circular economy

The increasing focus on sustainability and circular economy is a key growth driver for the stainless steel industry. As consumers and governments become more environmentally conscious, demand for eco-friendly and recyclable materials

is on the rise. Stainless steel, with its high recyclability and durability, is well-positioned to benefit from this shift. The industry is expected to see growth in production of recycled stainless steel, with a focus on reducing waste and minimising environmental impact. Austenitic and martensitic grades, such as 304/304L and 410/420, are expected to benefit from this trend, as they are widely used in applications where sustainability is a key consideration, such as food processing, pharmaceutical and architectural applications.

The growth of the circular economy is also expected to drive demand for stainless steel in new applications, such as renewable energy systems and energy storage. As the industry continues to evolve, new and innovative uses for stainless steel will drive growth and investment in the sector. The benefits of stainless steel, including its corrosion resistance, durability and recyclability, make it an ideal material for a wide range of sustainable applications.

Electric vehicles (EVs) and hybrid vehicles

Rising demand for EVs and hybrid vehicles is another key growth driver for the stainless steel industry. As the automotive industry continues to shift towards more sustainable and environmentally friendly options, demand for stainless steel is expected to increase. Stainless steel is used in various EV and hybrid vehicle applications, including battery components, fuel cell systems and exhaust systems. Martensitic and ferritic grades, such as 410/420 and 430, are expected to benefit from this trend due to their high strength, corrosion resistance and durability.

The use of stainless steel in EVs and hybrid vehicles is also driving demand for specialised grades, such as 17-4PH, which offers high strength and corrosion resistance. As demand for EVs and hybrid vehicles continues to grow, demand for these grades is expected to increase.

Energy storage and generation

Advances in energy storage and generation technologies, such as batteries and fuel cells, are increasing demand for stainless steel components, such as battery casings and fuel cell plates. Austenitic, martensitic and ferritic grades, such as 304/304L, 316/316L and 410/420, are being utilised in energy storage and generation applications due to their high strength, corrosion resistance and durability. The benefits of stainless steel, including its corrosion resistance, durability and recyclability, make it an ideal material for a wide range of energy storage and generation applications.

Advanced surface treatments

Innovations in surface treatments are driving demand for stainless steel across industries. Plasma nitriding, a process that enhances the surface hardness and wear resistance of stainless steel, is gaining traction in automotive and aerospace applications. This treatment allows stainless steel to replace more expensive materials in high-wear components. Another advancement is the development of self-healing coatings, which can repair minor scratches and damage autonomously, extending the lifespan of stainless steel products.

These coatings are particularly valuable in the marine and chemical processing industries, where corrosion resistance is critical. Additionally, nanostructured coatings are being developed to impart superhydrophobic properties to stainless steel surfaces, making them resistant to water, ice and various contaminants. This technology is finding applications in a wide range of fields, from kitchen appliances to industrial equipment, expanding the versatility of stainless steel. Austenitic grades such as 304/304L and 316/316L are expected to benefit from this trend, as they are widely used in applications where surface treatment is critical.

Additive manufacturing

Additive manufacturing, or 3D printing, is transforming the stainless steel industry by enabling the production of complex, lightweight components with enhanced performance characteristics. This technology is particularly beneficial for industries requiring customised, high-strength parts, such as the aerospace, automotive and medical sectors. Austenitic grades, especially 316L, are widely used in additive manufacturing due to their excellent corrosion resistance and biocompatibility.

Martensitic grades such as 17-4PH are gaining popularity for their high strength and hardness, making them suitable for tooling and industrial applications. The ability to create complex geometries and reduce material waste is driving the adoption of additive manufacturing in stainless steel production, leading to increased demand for specialised powder grades optimised for 3D printing processes.

Nanotechnology

Nanotechnology is significantly enhancing the properties and applications of stainless steel, driving demand across industries. By manipulating materials at the nanoscale, researchers have developed ultra-high-strength stainless steel with exceptional formability and corrosion resistance. Nanotechnology is also improving the performance of stainless steel in medical implants, catalysis and energy systems.

Austenitic grades, particularly 316L, are benefiting from nanoparticle enhancements for biomedical applications and drug delivery systems. Martensitic grades are seeing improvements in strength and wear resistance through nanoprecipitation. Ferritic grades are gaining enhanced corrosion resistance and surface properties. The integration of copper nanoparticles in steel production is reducing surface unevenness, limiting stress risers and fatigue cracking. These advancements are expanding the potential applications of stainless steel and driving demand for nano-enhanced grades across sectors.

Risks and challenges to demand growth

Economic cyclicality and demand volatility

Demand for stainless steel is closely tied to macroeconomic cycles, with key sectors such as construction, automotive and consumer durables experiencing fluctuations in line with GDP growth, interest rates and consumer spending. According to the World Steel Association, global steel demand is expected to grow by 0.3% in 2026 due to geopolitical uncertainties. Industries such as consumer durables and capital goods are particularly vulnerable to economic downturns.

Environmental regulations and decarbonisation pressures

The steel industry is under increasing pressure to reduce its environmental footprint, with stricter emissions standards and net-zero commitments driving the need for sustainable production methods. The Indian steel industry, which relies heavily on coal-based blast furnaces, has a higher emissions intensity than the global average. The European Union's Carbon Border Adjustment Mechanism (CBAM) may also penalise high-emission imports, disrupting export-oriented markets. The adoption of green technologies, such as hydrogen-based reduction or electric arc furnaces (EAFs), requires significant capital investment, increasing costs for stainless steel producers.

Raw material price volatility and supply-chain disruptions

The prices of critical raw materials, such as chromium and nickel, are subject to geopolitical instability and export restrictions. For example, Indonesia's nickel export bans between 2020 and 2023 led to global price spikes, squeezing margins for manufacturers. Supply-chain disruptions can have a significant impact on the industry, highlighting the need for diverse and resilient supply chains.

Technological substitution by alternative materials

The increasing use of advanced composites, aluminium alloys and carbon fibre in industries prioritising weight reduction and corrosion resistance poses a threat to the market share of stainless steel. In the automotive and consumer durables sectors, aluminium's lower density and recyclability make it an attractive alternative to stainless steel, particularly for structural components. Similarly, fibre-reinforced polymers are replacing steel in offshore oil and gas platforms due to their superior resistance to saltwater corrosion.

Import competition and trade barriers

The Indian stainless steel industry faces competition from substandard imports, particularly from China. While the PLI scheme aims to boost domestic production, retaliatory tariffs, such as proposed duties on Chinese type 200 stainless steel, risk disrupting regional trade flows and creating supply imbalances. Exporters in Southeast Asia may redirect shipments to India during global downturns, exacerbating price volatility.

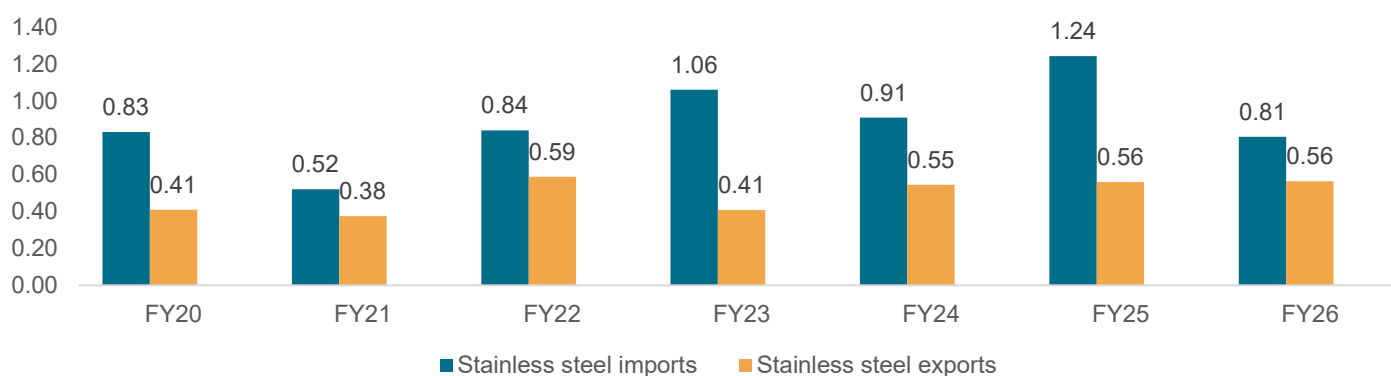
Skilled labour shortage

The Indian stainless steel industry also faces a significant risk due to skilled labour shortages. The sector requires specialised workers with expertise in areas such as metallurgy, welding and quality control. However, the availability of such skilled workers is limited, and the industry is likely to face challenges in attracting and retaining talent. This shortage can lead to decreased productivity, reduced quality and increased costs, ultimately affecting the competitiveness of the industry.

Trade flow of stainless steel in India

India has historically remained a net importer of stainless steel. The import volume of stainless steel fell a sharp 37% year-on-year to 0.52 million tonne in fiscal 2021 due to reduced domestic demand in the wake of the Covid-19 pandemic. Meanwhile, the export volume dropped a relatively moderate ~8% year-on-year to 0.38 million tonne.

Import and export volume of finished stainless steel in million tonne (FY20-26)



Source: JPC reports, Crisil Intelligence, industry

In fiscal 2022, the import and export volumes of stainless steel increased 61% and 57% on-year to 0.84 million tonne and 0.59 million tonne, respectively. The strong growth in export volume was primarily led by resumption of economic activities in the fiscal, which boosted production of stainless steel in India and increased production activities in end-use sectors abroad. Further, with the lifting of lockdowns, the demand for stainless steel from end-use industries also grew, supporting demand for imported stainless steel in India. As the production growth remained range-bound in fiscal 2023, the on-year growth in demand for stainless steel was accompanied by a robust 25% on-year increase in the volume of imports to 1.06 million tonne, driven by high availability of low-priced foreign steel. The exports of stainless steel from India dipped 31% on-year to 0.41 million tonne in fiscal 2023 because of high competition faced by India-made stainless steel from low-priced foreign steel in the export markets. However, with the government's strong policies to support domestic manufacturing industries, the stainless-steel export volume increased 34% on-year to 0.55 million tonne in fiscal 2024, and import volume decreased 14% on-year to 0.91 million tonne. In fiscal 2025, imports surged 36% to 1.24 million tonne before declining to 0.81 million tonne in fiscal 2026. Exports remained stable at 0.56 million tonne over fiscals 2025-2026.

Demand drivers (end-use industries) for stainless steel products and grades

Stainless steel long products	End-use industry
Stainless steel rolled bars	Infrastructure, building and construction, automotive, aerospace, industrial equipment
Stainless steel bright bars	Medical, food processing, pharmaceutical, industrial equipment

Stainless steel long products	End-use industry
Stainless steel wire rods	Architecture, building and construction, industrial manufacturing, automobiles, shipbuilding
Stainless steel TMT rebars	Architecture, building, construction (used in construction of floors, roofs, residential structures, flyovers, bridges, balcony fences, etc.)
Stainless steel seamless pipes and tubes	Oil and gas, petrochemical, automobiles, railways and transportation (ART) architecture, building and construction, medical devices, heat exchangers, power, aerospace, aviation
Titanium seamless pipes	Chemical processing, aerospace, pharmaceutical, power generation (nuclear and thermal), defence
Nickel alloy seamless pipes	Nuclear power, chemical, aerospace, food processing, medical, marine, oil and gas, petrochemical
Stainless steel forgings and flanges	Automobiles; food, chemical and related industries; oil and gas

Source: Crisil Intelligence, industry

Stainless steel grade	End-use industry
Austenitic	Food and beverage, pharmaceutical, chemical processing, architecture, building and construction, marine, oil and gas
Martensitic	Automotive, aerospace, pharmaceutical, architecture, building and construction
Ferritic	Architecture, building and construction, automotive
Duplex	Oil and gas, chemical processing, marine, power
Precipitation-hardening	Aerospace, automotive, industrial, pharmaceutical
Superalloys	Aerospace, oil and gas, marine, power

Source: Crisil Intelligence, industry

Key factors driving demand across end-use applications

- Urbanisation:** Over the past decade, rapid urbanisation has fuelled demand across all end-use segments. About 40% of India's population is projected to reside in towns and cities by 2036, up from 30% in 2011, contributing to 70% of the country's GDP⁹. This trend of a growing population with an average age of 29 years will drive demand for stainless steel across industries
- Rising disposable income:** India's per capita net national income (at constant prices) was Rs 121,968 in fiscal 2026, according to NSO estimates. This marks an almost 60% increase from the fiscal 2015 per capita income of Rs 77,826. Further, the Indian consumer has transitioned from the savings mindset to the consumption one, resulting in higher growth in all consumption sectors such as real estate, manufacturing, automobiles and consumer durables
- Government spending on Pradhan Mantri Awas Yojana and infrastructure:** The government's vision of a \$5 trillion economy by fiscal 2027 entails investments worth Rs 100 trillion in infrastructure sectors, including several steel-intensive areas such as Housing for All, Gati Shakti National Master Plan, Bharatmala Pariyojana, Sagarmala Programme, 100% electrification and Jal Jeevan Mission. These focused investments will drive demand for steel and stainless steel
- Manufacturing focus under Atmanirbhar Bharat:** The Atmanirbhar Bharat campaign has focused on economy, infrastructure, systems, demography and demand. The emphasis on full-scale utilisation of demand and supply and self-reliance has boosted domestic manufacturing. The new manufacturing capacity additions and expansions are

⁹ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2219926®=48&lang=2>

expected to add to the stainless steel demand across industries such as food processing, pharmaceutical, power, dairy, oil and gas, and medical equipment

Government policies driving demand

National Stainless Steel Policy

The Indian government is expected to unveil a national stainless steel policy, which would establish medium- and long-term targets for production and consumption. This is expected to provide more clarity on critical raw materials consumed in the industry and the impact of imports from major players such as China. Although these issues were partly addressed in the budget for fiscal 2025, the industry is awaiting a policy initiative under the policy.

Stainless steel policy for coastal areas

The Ministry of Road Transport and Highways issued a directive in September 2024, mandating the use of stainless steel in new and ongoing projects near coastal areas. India's stainless steel policy for coastal areas primarily focuses on mitigating the impact of corrosion and enhancing the durability of infrastructure in marine environments. India's coastline spans 7,516.6 km, encompassing both the mainland and several islands, bordered by the Bay of Bengal to the east, the Indian Ocean to the south, and the Arabian Sea to the west. The policy is designed to increase the use of high-tensile stainless steel in infrastructure projects, particularly bridges and highways near coastal areas, address the severe corrosion risks posed by high salt content in the air and water in these regions, and ensure sustainability and safety of structures in coastal and marine zones.

Earlier policies required stainless steel only in zones within 15 km of the coastline or areas classified as extreme environments (e.g., creeks). The new directive expands the environmental classification criteria to include broader marine exposure zones due to climate change and the increasing risks posed by rising sea levels and saltwater intrusion.

Key policy details:

- **Material requirements:** Stainless steel with high resistance to chloride-induced corrosion is mandated
- **Coverage expansion:** Includes all bridge superstructures and critical infrastructure in regions prone to marine exposure
- **Longevity improvements:** The use of stainless steel is expected to extend the lifespan of structures by up to 75 years, compared with traditional materials that degrade faster in saline conditions
- **Budgetary impacts:** Initial construction costs increase by 10-15% due to the use of stainless steel but are offset by reduced maintenance and replacement costs over the long term

This policy aligns with India's broader goals of achieving sustainable development and mitigating climate-related risk to infrastructure. It targets a 50% reduction in maintenance-related expenditure for coastal infrastructure. India is actively advancing several coastal infrastructure projects to enhance connectivity, trade and resilience against climate change. Notable initiatives include:

Mumbai Coastal Road Project: Valued at Rs 13,000 crore, this project features India's first undersea tunnel and aims to provide a seamless north-south route along Mumbai's western coastline.

Sagarmala Programme: It is another significant initiative, focused on modernising ports and improving coastal connectivity across India. With a total outlay of Rs 5.56 trillion, this programme aims to reduce logistics costs, promote port-led industrialisation and increase exports.

Upcoming projects include the Chennai Peripheral Ring Road, a 133.4 km project designed to enhance connectivity to the Chennai Port, with an estimated cost of Rs 12,000 crore. The Rs 40,000-crore Kakinada Petrochemical Complex in Andhra Pradesh aims to develop port-based petrochemical facilities, with operations targeted to commence in 2027. These projects

collectively aim to strengthen India's coastal infrastructure, promote economic growth and improve resilience against environmental challenges.

Anti-dumping duties on stainless steel seamless pipes

The Government of India has implemented significant anti-dumping duties on imports of stainless steel seamless tubes and pipes from China, effective from December 2022 for five years. This decision was made following an investigation by the DGTR, which uncovered evidence of dumping practices harming domestic manufacturers.

The duties, imposed through Notification No. 31/2022-Customs (ADD), vary by Chinese manufacturer, ranging from \$114 per metric tonne for Zhejiang Bangnuo Steel Pipe Co., Ltd. to \$3,801 per metric tonne for unspecified Chinese producers. Notably, four Chinese companies—Zhejiang Jiuli Hi-Tech Metals, Huadi Steel Group, Jiangsu Wujin Stainless Steel Pipe Group and Zhejiang Tsingshan Steel Pipe—have been exempted from these duties.

The investigation was initiated in response to complaints filed by domestic producers. The imposition of these protective measures aims to safeguard India's domestic stainless steel industry from unfair pricing practices that could potentially undermine local manufacturing capacity. Historically, such measures have led to an increase in capacity utilisation rates of domestic stainless steel tube and pipe manufacturers. This policy is likely to continue providing benefits to domestic players in terms of operational efficiencies and margins, presenting an opportunity for the domestic stainless steel tube and pipe manufacturing industry to grow and expand its operations.

Competition benchmarking

Operational benchmarking

The table below presents a comparative analysis of Jay Jagdamba Limited (JJL) and its peers, which manufacture and offer a similar product mix, for operational benchmarking.

Stainless steel producers

Companies	Stainless steel billets and rolled products	Stainless steel bright bars	Stainless steel forgings and flanges	Stainless steel seamless pipes and tubes	Stainless steel wires
Viraj Profiles Pvt. Ltd.					
Mukand Limited					
Chandan Steel Limited					
Laxcon Steels Limited					
Ambica Steels Limited					
Jay Jagdamba Limited					
Welspun Specialty Solutions Limited					

Notes:

- 1) Green tabs indicate that the respective companies have the capability to manufacture the corresponding product. Orange indicates that the company has recently established forward integration for the corresponding product
- 2) Stainless steel long products include stainless steel billets, ingots, rolled bars, bright bars and profiles

Source: Company reports and websites, industry, Crisil Intelligence

Seamless pipe producers

Company	Stainless steel long products	Stainless steel forgings and flanges	Stainless steel seamless pipes and tubes	Stainless steel wires
Venus Pipes and Tubes Limited				
Ratnamani Metals and Tubes Limited				
Scoda Tubes Limited				
Suraj Limited				

Note: Stainless steel long products include stainless steel billets, ingots and bars

Source: Company reports and websites, industry, Crisil Intelligence

The company has plans to expand its product offerings to include stainless steel seamless pipes, super alloy products such as nickel alloy, and titanium seamless pipe. This expansion will enable Jay Jagdamba to position it among Indian manufacturers with capabilities spanning from molten steel to seamless pipe production. This expansion is expected to enhance the company's market positioning and competitiveness, potentially unlocking new market opportunities.

Company-wise product mix

Stainless steel producers

Company	Product mix
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Viraj Profiles Pvt. Ltd.	Stainless steel wires, wire rods, fasteners, bright bars, flanges, profiles
Mukand Limited	Stainless steel blooms/ billets, wire rods, bright bars, bars, rebars
Chandan Steel Limited	Stainless steel bars, channels, t-sections, re-bars, wires, forgings, flanges, cast billets, round cornered square/ rolled billets, ingots, seamless pipes and tubes
Laxcon Steels Limited	Stainless steel ingots, billets/ blooms, bars, round cornered squares (RCS), channels, angles, T-profiles
Ambica Steels Limited	Stainless steel bars, bright bars, billets, ingots, hot-rolled bar wires, welding wires
Jay Jagdamba Limited	Stainless steel ingots, billets, round bars, bright bars, RCS, wires, wire rods, angle bars, forged products and flanges, stainless steel, nickel alloy, superalloys, titanium seamless tubes
Welspun Specialty Solutions Limited	Stainless steel blooms, ingots, round bars, RCS, bright bars, seamless pipes and tubes, hollow bars

Source: Company reports and websites, industry, Crisil Intelligence

Seamless pipe producers

Company	Product mix
Venus Pipes and Tubes Limited	Stainless steel high-precision, heat exchanger, hydraulic, instrumentation, welded, and seamless pipes and tubes
Ratnamani Metals and Tubes Limited	Carbon, alloy and stainless steel seamless and welded pipes and tubes, coated pipes and tubes
Scoda Tubes Limited	Seamless pipes (including high-precision tubes and 'U' tubes), seamless hydraulic/ instrumentation tubing, welded tubes, hot-pierced mother hollows
Suraj Limited	Stainless steel seamless pipes, heat exchanger tubes, 'U' tubes, flanges, stub ends, fittings, electropolished tubes

Source: Company reports and websites, industry, Crisil Intelligence

Company-wise grade mix

Stainless steel producers

Companies	Grade range
Viraj Profiles Pvt. Ltd.	201, 202, 204Cu, 301, 302, 303, 304, 304Cu, 304HC, 304L, 304H, 309/S 310/S, 312, 314, 316, 316L, 316LN, 316Ti, 316LCu, 321, 410, 416, 420, 430, 430F, 430L, 431, 440C, 630, 17-4PH, F51, F53, F60
Mukand Limited	204Cu, 301, 303, 304/Cu/L/HC, 309/Si/S, 314, 316/L/Ti, 317/L, 321/H, 347/H, 409, 410, 416, 420/B/C/L/F, 431, 434, 904L, 2205, 2304, 2101, 2507, 17-4 PH
Chandan Steel Limited	303, 304, 304L, 310, 310S, 316, 316L, 316Ti, 321, 317, 317L, 347, 904L, F51, F60 / 2205, F61 / 2507 Cu, F53 / 2507, F55 / Zeron 100, F6a / 410, 420, 416, 431, 409, 430, 430 F
Laxcon Steels Limited	301, 302, 303, 304/L/H/LN/N, 305, 310/S, 314, 316/L/LN/H/Ti, 317/L, 321/H, 329, 347/H, 201, 202, 204/CU, XM 19, 309, 403, 410, 416, 420/B/C, 431, 17-4-PH, 15-5-PH, 15-7-PH, 17-7-PH, 14-8-Mo, 405, 409, 430/F, 434, 441, F-53, F-51, 2304, F-60
Ambica Steels Limited	303, 304/L/H/LN/N, 316/L/H/Ti, 321/H, 347/H, 201, 202, 204/Cu, 403, 410, 416, 420/B/F, 431, 405, 409/Ti/Nb, 430/F, 17/4PH
Jay Jagdamba Limited	201, 202, XM-28, 302, 303, 304, 304L, 304LN, 305, 308, 309, 310, 310S, 316, 316L, 316Ti, 316LN, 317, 321, 347, 904L, F51/S31803, F53/S32750, F55/S32760, F60/S32205, 430, 430L, 430F, 446, 403, 410, 410L, 416, 420, 420A, 420B, 420C, 420F, 431, F5, F9, F11, F12, F22, F91, 4140, 4340, 8620, H11
Welspun Specialty Solutions Limited	303, 304/H/L, 321/H, 316/H/L/Ti, 317/L, 347/H, 309/S, 310/S, 409, 430/F/Ti, 403, 410, 414, 416, 420, 431, 17-4PH, 15-5PH, F-51, F-53, F-55, F-60

Source: Company reports and websites, Industry, Crisil Intelligence

Seamless pipe producers

Companies	Grade range
Venus Pipes and Tubes Limited	201, 301, 302, 303, 304/L/H/LN, 305, 314 316/L/H/LN/Ti, 309, 310/L/H/S, 317/L/H, 321/H, 329, 347/H, 403, 405, 409/L, 410, 430/Ti, 436, 439, 904/L, 1.4462, 1.4501
Ratnamani Metals and Tubes Limited	304/L/LN/H/N, 310/L/LN/H/N/Ti, 321/H, 347/H, 316/L/LN/H/N/Ti, 317/L, 377/M, 318/L
Scoda Tubes Limited	304/L/H, 316/L/H/T, 317/L, 321/H, 347/H, 310/S, 309/S, 405, 410, S31803, S32205, S32750, 1.4301, 1.4307, 1.4401, 1.4404, 1.4432, 1.4541, 1.4571
Suraj Limited	304/L/H/N/LN, 316/L/H/Ti/N/LN, 310, 317/L, 321/H, 347/H, 405, 410, F-51, F53, F55, F60, F68, 904L

Source: Company reports and websites, industry, Crisil Intelligence

Production overview

Stainless steel producers

Company	Melting capacity (TPA)	Rolling capacity (TPA)	Bright bar capacity (TPA)	Flanges capacity (TPA)
Viraj Profiles Pvt. Ltd.	528,000		180,000	18,000
Mukand Limited	180,000			
Chandan Steel Limited	80,000		30,000	36,000
Laxcon Steels Limited	140,000			
Ambica Steels Limited	80,000			
Jay Jagdamba Limited	84,000	78,000	96,000	8,400
Welspun Specialty Solutions	150,000	125,000		

Source: Company reports and websites, industry, Crisil Intelligence

TPA: Tonne per annum

Seamless pipe producers

Company	Seamless pipes capacity (TPA)
Venus Pipes and Tubes Limited	20,400
Ratnamani Metals and Tubes Limited	50,000*
Scoda Tubes Limited	20,068
Suraj Limited	-
Welspun Specialty Solutions Limited	18,000

Source: Company reports and websites, industry, Crisil Intelligence

TPA: Tonne per annum

Note: *Refers to the total stainless-steel capacity

Exports (fiscal 2025)

Stainless steel producers

Companies	Exports share in revenue
Viraj Profiles Pvt. Ltd.	-
Mukand Limited	9%
Chandan Steel Limited	-
Laxcon Steels Limited	-

Ambica Steels Limited	-
Jay Jagdamba Limited	29%
Welspun Specialty Solutions Limited	36%

Source: Company reports, Crisil Intelligence

Seamless pipe producers

Companies	Exports share in revenue
Venus Pipes and Tubes Limited	35%
Ratnamani Metals and Tubes Limited	36%
Scoda Tubes Limited	27%
Suraj Limited	-

Source: Company reports, Crisil Intelligence

Capacity expansion plans

Stainless steel producers

Companies	Plans
Jay Jagdamba Limited	The company's strategic expansion into stainless steel, nickel alloy, super alloys and titanium seamless tubes is a significant growth driver

Source: Company financials, Crisil Intelligence

Seamless pipe producers

Companies	Plans
Venus Pipes and Tubes Limited	The company commenced commercial operations of fittings and added 6,000 tonne per annum of seamless pipes capacity in May 2026
Scoda Tubes Limited	The company is expected to add 8,000 tonne per annum capacity of welded tubes and pipes at Rs 400 million in fiscal 2027

Source: Company financials, Crisil Intelligence

Jay Jagdamba Limited has invested in capital expenditures, resulting in a fully integrated plant. This integration allows the company to manage its production process and ensure consistency and quality in its products.

The company's business model is based on a diversified product mix and optimized resource utilization. Its operations include in-house melting, rolling, casting, annealing, heat treatment facilities, and forging, which enables the company to manage its supply of raw materials.

Jay Jagdamba supplies products to a range of industries, including automotives, data centers, power plants, water treatment plants, heat exchangers and boilers, food processing machines, medical and pharmaceuticals, oil and gas, electronics, aerospace and defence, marine applications, retail products, mining, construction and infrastructure, precision machined parts and consumer goods. This diversification reduces the company's dependence on any single sector or product. The company's product portfolio includes a range of products that can be sold to various clients. The company produces products in smaller lot sizes and has lower minimum order quantities (MOQs). The company's operations involve producing products with different order sizes, delivery times, and prices.

As a recycling plant, Jay Jagdamba generates revenue from the processing of stainless steel scrap. The company's business is affected by the generation of stainless steel scrap in downstream processing. The demand for scrap is influenced by industry cycles.

The stainless steel industry is subject to cyclical fluctuations, external shocks, and price volatility. Jay Jagdamba Ltd has implemented a business model that includes bespoke manufacturing and back-to-back supplier pricing arrangements. This approach is intended to help manage operational risks and reduce the impact of industry cycles and market fluctuations on the company's operations. While the company cannot fully eliminate the effects of external shocks, its business model and operations are designed to reduce their impact.

Financial benchmarking

Peer comparison for fiscal 2026 (Rs million unless mentioned otherwise)

Particulars	Stainless steel producer						
	Viraj Profiles	Mukand	Chandan Steel	Laxcon Steels	Ambica Steels	Jay Jagdamba Limited	Welspun Specialty Solutions
Revenue from operations	N/A	48,898.30	N/A	N/A	N/A	31,620.89	8,862.00
Ebitda	N/A	1,710.30	N/A	N/A	N/A	5,840.94	468.9
Ebitda margin (%)	N/A	3.50%	N/A	N/A	N/A	18.47%	5.29%
PAT	N/A	6041.5	N/A	N/A	N/A	2,619.17	226.7
PAT margin (%)	N/A	12.36%	N/A	N/A	N/A	8.28%	2.56%
Return on capital employed (%)	N/A	35.58%	N/A	N/A	N/A	16.18%	10.43%
Return on equity (%)	N/A	39.69%	N/A	N/A	N/A	12.54%	4.97%
Interest coverage ratio (times)	N/A	4.41	N/A	N/A	N/A	3.12	1.87

Particulars	Seamless pipe producer			
	Venus Pipes and Tubes	Ratnamani Metals and Tubes	Scoda Tubes	Suraj Ltd
Revenue from operations	11,668.48	44,939.62	5,186.50	2,058.51
Ebitda	1,901.21	7,473.32	762.44	163.27
Ebitda margin (%)	16.29%	16.63%	14.70%	7.93%
PAT	1019.62	5,344.65	388.43	74.70
PAT margin (%)	8.74%	11.89%	7.49%	3.63%
Return on capital employed (%)	22.83%	16.32%	17.72%	10.70%
Return on equity (%)	15.25%	12.70%	9.95%	5.42%
Interest coverage ratio (times)	4.36	23.54	3.12	3.45

Source: Company financials, Crisil Intelligence

Note: Chandan Steel, Laxcon Steels, Viraj Profiles and Ambica Steels are unlisted. Hence, their financials for fiscal 2026 are unavailable

Definitions of the financial parameters mentioned in the above table:

1. Ebitda is calculated as profit for the year minus other income plus finance costs, depreciation and amortisation and total tax expense.
2. Ebitda margin is calculated as Ebitda divided by revenue from operations.
3. PAT margin is calculated as profit for the year divided by revenue from operations.
4. Return on capital employed is calculated as Ebit divided by capital employed. Ebit is calculated as profit for the year plus finance costs and total tax expense. Capital employed is calculated as the sum of Total Assets minus current liabilities.
5. Return on equity is calculated as profit for the year divided by average equity where average equity is the average of opening and closing equity for the year.
6. Interest coverage ratio is calculated as Ebit divided by finance cost. Ebit is calculated as profit for the year plus finance costs and total tax expense.

Peer comparison for fiscal 2025 (Rs million unless mentioned otherwise)

Particulars	Stainless steel producer						
	Viraj Profiles	Mukand	Chandan Steel	Laxcon Steels	Ambica Steels	Jay Jagdamba Limited	Welspun Specialty Solutions
Revenue from operations	85,225.18	48,899.90	17,323.8	19,105.97	13,966.17	21,942.09	7,237.20
Ebitda	5,379.90	2,842.30	2,903	1,319.79	764.33	3,431.73	307.9
Ebitda margin (%)	6.31%	5.81%	16.76%	6.91%	5.47%	15.64%	4.25%
PAT	1,904.79	758.9	2,079.7	554.31	246.54	1,609.93	-40.9
PAT margin (%)	2.24%	1.55%	12.00%	2.90%	1.77%	7.34%	-0.57%
Return on capital employed (%)	17.08%	22.06%	25.59%	18.60%	14.44%	16.85%	8.72%
Return on equity (%)	8.20%	7.99%	19.25%	10.35%	7.39%	9.98%	-0.94%
Interest coverage ratio (times)	3.64	1.91	16.48	3.64	2.36	2.98	0.91

Particulars	Seamless pipe producer			
	Venus Pipes and Tubes	Ratnamani Metals and Tubes	Scoda Tubes	Suraj Limited
Revenue from operations	9,585.26	51,864.74	4,848.90	2,337.43
Ebitda	1,676.00	8,235.16	780.52	298.82
Ebitda margin (%)	17.49%	15.88%	16.10%	12.78%
PAT	928.89	5,415.70	317.41	133.05
PAT margin (%)	9.69%	10.44%	6.55%	5.69%
Return on capital employed (%)	27.84%	19.84%	31.44%	17.14%
Return on equity (%)	17.48%	14.78%	21.11%	10.00%
Interest coverage ratio (times)	4.65	20.72	2.91	4.92

Source: Company financials, Crisil Intelligence

Note: Financial data for Ambica Steels Ltd for the fiscal is not available

Peer comparison for fiscal 2024 (Rs million unless mentioned otherwise)

Particulars	Stainless steel producer						
	Viraj Profiles	Mukand	Chandan Steel	Laxcon Steels	Ambica Steels	Jay Jagdamba Limited	Welspun Specialty Solutions
Revenue from operations	85,757.30	51,748.10	19,387.27	17,775.98	12,789.50	14,787.25	6,966.70
Ebitda	5,387.38	2,919.90	3,641.88	1,608.15	1,028.52	1,584.54	558.3
Ebitda margin (%)	6.28%	5.64%	18.78%	9.05%	8.04%	10.72%	8.01%
PAT	2,680.30	1027	2,501.53	889.49	537.3	515.05	624.7
PAT margin (%)	3.13%	1.98%	12.90%	5.00%	4.20%	3.48%	8.97%
Return on capital employed (%)	20.57%	10.73%	37.68%	26.49%	23.40%	15.49%	27.67%
Return on equity (%)	12.08%	11.15%	28.44%	18.42%	16.71%	8.42%	67.11%

Interest coverage ratio (times)	4.01	1.96	18.25	5.08	4.33	1.90	1.86
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Particulars	Seamless pipe producer			
	Venus Pipes and Tubes	Ratnamani Metals and Tubes	Scoda Tubes	Suraj Limited
Revenue from operations	8,021.98	50,590.96	3,998.62	3,306.65
Ebitda	1,463.16	8,971.22	587.92	403.35
Ebitda margin (%)	18.24%	17.73%	14.70%	12.20%
PAT	859.79	6,251.01	183.01	215.24
PAT margin (%)	10.72%	12.36%	4.58%	6.51%
Return on capital employed (%)	30.70%	25.52%	36.80%	27.76%
Return on equity (%)	21.17%	19.44%	28.77%	17.57%
Interest coverage ratio (times)	6.24	19.34	2.36	9.37

Source: Company financials, Crisil Intelligence

To benchmark the performance of Jay Jagdamba Limited. against its competitors, we have compared the profitability, liquidity and leverage across two peer sets. The peer set for financial benchmarking includes companies with operational capabilities and product offerings that are comparable to those of Jay Jagdamba Limited (J JL). The benchmarking has been categorized based on their core businesses and product segments.

Peer set 1: Comprises Mukand Limited, Chandan Steel Limited, Viraj Profile Pvt. Ltd., Laxcon Steels Limited, Ambica Steels Limited and Welspun Specialty Solutions Limited, which have a diverse product portfolio that caters to a range of industrial applications, similar to Jay Jagdamba's stainless steel business segment.

Peer set 2: Includes Venus Pipes and Tubes Limited, Ratnamani Metals and Tubes Limited, Scoda Tubes Limited and Suraj Limited, selected for their expertise in seamless pipe manufacturing, a product category J JL has expanding into, enabling benchmarking and informed strategic decisions for the new business venture.

The comparison with these peers will provide valuable insights into J JL's competitiveness and help identify areas for improvement.

Revenue (Rs million)

Stainless steel producers

Year	FY24	FY25	FY26
Jay Jagdamba Limited	14,787.25	21,942.09	31,620.89
Mukand Ltd	51,748.10	48,899.90	48,898.30
Chandan Steel Ltd	19,387.27	17,323.80	N/A
Viraj Profiles Pvt. Ltd.	85,757.35	85,225.18	N/A
Ambica Steels Ltd	12,789.50	13,966.167	N/A
Laxcon Steels Ltd	17,775.98	19,105.97	N/A
Welspun Specialty Solutions Limited	6,966.70	7,237.20	8,862.00

Source: Company financials, Crisil Intelligence

Seamless pipe producers

Year	FY24	FY25	FY26
Venus Pipes and tubes Ltd	8,021.98	9,585.26	11,668.48
Ratnamani Metals and Tubes Ltd	50,590.96	51,864.74	44,939.62
Scoda Tubes Ltd	3,998.62	4,848.90	5,186.50
Suraj Ltd	3,306.65	2,337.43	2,058.51

Source: Company financials, Crisil Intelligence

JJL's revenue was Rs 31,620.89 million in fiscal 2026, a 113.84% growth from fiscal 2024. It surpassed peers such as Welspun Speciality Solutions (Rs 8,862 million). However, the company lagged Mukand (Rs 48,898.30 million). Among seamless pipe producers, the company ranked 2nd lagging behind only Ratnamani Metals and Tubes (Rs 44,939.62 million). The company clocked a revenue CAGR of 46.23% between fiscals 2024 and 2026, being positioned as a strong contender in the stainless steel industry.

Ebitda (Rs million)

Stainless steel producers

Year	FY24	FY25	FY26
Jay Jagdamba Limited	1,584.54	3,431.73	5,840.94
Mukand Ltd	2,919.90	2,842.30	1,710.30
Chandan Steel Ltd	3,641.88	2,903.00	N/A
Viraj Profiles Pvt. Ltd.	5,387.38	5,379.90	N/A
Ambica Steels Ltd	1,028.52	764.33	N/A
Laxcon Steels Ltd	1,608.15	1,319.79	N/A
Welspun Speciality Solutions Ltd	558.30	307.90	468.90

Source: Company financials, Crisil Intelligence

Seamless pipe producers

Year	FY24	FY25	FY26
Venus Pipes and Tubes Ltd	1,463.16	1,676.00	1,901.21
Ratnamani Metals and Tubes Ltd	8,971.22	8,235.16	7,473.32
Scoda Tubes Ltd	587.92	780.52	762.44
Suraj Limited	403.35	298.82	163.27

Source: Company financials, Crisil Intelligence

Note: Fiscal 2026 financials for Chandan Steel, Laxcon Steels, Viraj Profiles and Ambica Steels are unavailable, Fiscal 2025 financials for Ambica Steels Ltd is not available

Jay Jagdamba Ltd reported a 91.99% EBITDA CAGR from FY24-26. The company's EBITDA growth is a reflection of its operations and market presence. JJL's Ebitda surged 70.2% on-year to Rs 5,840.94 million in fiscal 2026 and clocked a CAGR of 91.99% from fiscals 2024 to 2026. The company outperformed Mukand (Rs 1,710.3 million) and Welspun Speciality solutions (Rs 468.9 million) in peer set 1 in fiscal 2026. For peer set 2 JJL ranked 2nd outperforming Venus Pipes and Tubes (Rs 1,901.21 million), , Scoda Tubes (Rs 762.44 million) and Suraj (Rs 163.27 million). It lagged Ratnamani Metals (Rs 7,473.32 million).

PAT (Rs million)

Stainless steel producers

Year	FY24	FY25	FY26
Jay Jagdamba Limited	515.05	1,609.93	2,619.17
Mukand Ltd	1,027.00	758.90	6,041.50
Chandan Steel Ltd	2,668.00	2,079.70	N/A
Viraj Profiles Pvt. Ltd.	2,680.30	1,904.79	N/A
Ambica Steels Ltd	537.30	246.54	N/A
Laxcon Steels Ltd	N/A	554.31	N/A
Welspun Specialty Solutions Ltd	624.70	-40.90	226.70

Source: Company financials, Crisil Intelligence

Seamless pipe producers

Year	FY24	FY25	FY26
Venus Pipes and Tubes Ltd	859.79	928.89	1,019.62
Ratnamani Metals and Tubes Ltd	6,251.01	5,415.70	5,344.65
Scoda Tubes Ltd	183.01	317.41	388.43
Suraj Limited	215.24	133.05	74.70

Source: Company financials, Crisil Intelligence

Jay Jagdamba Ltd has reported a notable increase in Profit After Tax (PAT) from FY24 to FY26, with a Compound Annual Growth Rate (CAGR) of 125.5%. This growth rate ranks second among its peer set of seamless pipes producers, which includes Venus Pipes and Tubes, Ratnamani Metals and Tubes, Scoda Tubes, and Suraj Limited. Mukand reported a higher PAT CAGR of 142.54% during the same period. In FY26, Jay Jagdamba reported a PAT of ₹2,619.17 million, representing a 62.7% increase from its FY25 PAT of ₹1,609.93 million. The company's revenue for FY26 grew by 44.1% over its FY25 revenue, while its EBITDA increased by 70.2%. Jay Jagdamba's financial performance is a direct result of its operational efficiency and market presence.

Profitability parameters

Peer set 1: Comprises Mukand Limited, Chandan Steel Limited, Viraj Profile Pvt. Ltd., Laxcon Steels Limited, Ambica Steels Limited and Welspun Specialty Solutions Limited, which have a diverse product portfolio that caters to a range of industrial applications, similar to Jay Jagdamba's stainless steel business segment.

Peer set 2: Includes Venus Pipes and Tubes Limited, Ratnamani Metals and Tubes Limited, Scoda Tubes Limited and Suraj Limited, selected for their expertise in seamless pipe manufacturing, a product category JJL has expanding into, enabling benchmarking and informed strategic decisions for the new business venture.

Operating profit margin (%)

Year	FY24	FY25	FY26
Jay Jagdamba Limited	10.7%	15.6%	18.5%
Peer set 1 (average)	9.3%	7.6%	4.4%
Peer set 2 (average)	15.7%	15.6%	13.9%

Note: The peer average excludes unlisted companies (Chandan Steel, Laxcon Steels, Viraj Profiles and Ambica Steels) due to unavailability of fiscal 2026 financials.

Source: Company financials, Crisil Intelligence

JJL has demonstrated consistent operational efficiency, with operating profit margin reaching 18.5% in fiscal 2026. It outperformed both peer set 1 and peer set 2 which saw margin average 4.4% and 13.9% respectively in fiscal 2026 and ranking 1st in peer set 2.

Net profit margin (%)

Year	FY24	FY25	FY26
Jay Jagdamba Limited	3.5%	7.3%	8.3%
Peer set 1 (average)	6.0%	3.3%	7.5%
Peer set 2 (average)	8.5%	8.1%	7.9%

Note: The peer averages excludes Chandan Steel, Laxcon Steels, Viraj Profiles, and Ambica Steels due to the unavailability of 2026 financials.

Source: Company financials, Crisil Intelligence

JJL's net profit margin jumped to 8.3% in fiscal 2026 from 7.3% in fiscal 2025 and 3.5% in fiscal 2024, reflecting its improving profitability and operational efficiency. Peer set 1 averaged 7.5% in fiscal 2026 while, while peer set 2 saw net profit margin of 7.9% both lower than JJL. JJL's net profit margin in fiscal 2026 placed it 3rd in peer set 2.

Return on capital employed (%)

Year	FY24	FY25	FY26
Jay Jagdamba Limited	15.49%	16.85%	16.18%
Peer set 1 (average)*	24.43%	17.75%	23.01%
Peer set 2 (average)*	30.20%	24.07%	16.89%

Note: The peer averages excludes unlisted companies (Chandan Steel, Laxcon Steels, Viraj Profiles, and Ambica Steels) due to the unavailability of 2026 financials.

Source: Company financials, Crisil Intelligence

JJL's return on capital employed improved to 16.18% in fiscal 2026 from 15.49% in fiscal 2024. JJL's return on capital employed was lower than the peer averages for both peer set 1 (23.01%) and peer set 2 (16.89%) in fiscal 2026. JJL ranked 4th in peer set 2 lagging behind Venus Pipes and Tubes, Scoda Tubes and Ratnamani Metals and Tubes.

Comparison of return on equity (%)

Year	FY24	FY25	FY26
Jay Jagdamba Limited	8.4%	10.0%	12.5%
Peer set 1 (average)*	25.7%	8.7%	22.3%
Peer set 2 (average)*	21.7%	15.8%	10.8%

Note: The peer averages excludes unlisted companies (Chandan Steel, Laxcon Steels, Viraj Profiles, and Ambica Steels) due to the unavailability of 2026 financials.

Source: Company financials, Crisil Intelligence

JJL's return on equity improved to 12.5% in fiscal 2026, from 10.0% in fiscal 2025 and 8.4% in fiscal 2024. It remains below peer set 1's average of 22.3% in fiscal 2026 but, higher than peer set 2's average of 10.8% ranking 3rd amongst peer set 2.

Leverage parameters

Interest coverage ratio (times)

Year	FY24	FY25	FY26
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Jay Jagdamba Limited	1.9	3.0	3.1
Peer set 1 (average)	5.9	4.8	3.1
Peer set 2 (average)	9.3	8.3	8.6

Note: The peer averages exclude unlisted companies (Chandan Steel, Laxcon Steels, Viraj Profiles and Ambica Steels) due to the unavailability of Fiscal 2026 financials.

Source: Company financials, Crisil Intelligence

JJL's interest coverage ratio has improved steadily to reach 3.1x in fiscal 2026, reflecting better debt-servicing ability due to rising operating profits. Peer set 1's interest coverage ratio declined to 4.8x in fiscal 2025 from 5.9x in fiscal 2024 to 3.1x in fiscal 2026. Peer Set 2's average interest coverage ratio for fiscal 2026 was 8.6x.

Company profile: Jay Jagdamba Limited

Business profile

Jay Jagdamba Limited (JL) is engaged in the manufacturing of stainless steel products, including ingots and billets, rolled and bright products, flanges, and seamless pipes. JL operates an integrated manufacturing facility located at Wada, Maharashtra encompasses melting, rolling, casting, heat treatment and seamless pipe manufacturing. The facility's melting plant, complemented by its argon oxygen decarburisation (AOD) plant, plays a role in processing stainless steel scrap, enabling Jay Jagdamba Limited to precision-mix various ferroalloys and other elements as required by different standards. This allows Jay Jagdamba Limited to produce a wide range of steel grades.

The stainless steel market is subject to fluctuations and external factors beyond the control of individual companies. In FY 2024, the market experienced a decline in prices, with a 23% decrease in international markets and a 21% decrease in domestic markets. Companies in the industry are affected by these market fluctuations. Jay Jagdamba Limited operates on a produce-to-order basis, which allows the company to adjust its pricing based on vendor inputs. This approach may help the company reduce the impact of external price shocks on its financial performance, although it is unlikely to completely eliminate the effects of market volatility.

In line with India's growing trend of scrap-based steel production, which accounted for approximately 25% of total steel production in fiscal 2026, Jay Jagdamba Limited has leveraged this approach to produce high-quality steel products. By utilizing a combination of imported and domestic stainless steel scrap, the company minimizes environmental impact while offering a diverse range of products. Jay Jagdamba Limited has also expanded its capabilities to manufacture seamless pipes, utilizing its in-house Bright Bar product to ensure consistency and quality.

Grades offered by the company

Product-grade categories	Grades offered
Austenitic grades	201, 202, XM-28, 302, 303, 304, 304L, 304LN, 305, 308, 309, 310, 310S, 316, 316TI, 316L, 316LN, 317, 321, 347, 904L
Austenitic-ferritic grades	F51/S31803, F53/S32750, F55/S32760, F60/S32205
Ferritic grades	430, 430L, 430F, 446
Martensitic grades	403, 410, 410L, 416, 420, 420A, 420B, 420C, 420F, 431
Low alloy steels	F5, F9, F11, F12, F22, F91, 4140
Medium-carbon alloy steels	4340
Low-carbon alloy steels	8620
Tool steel	H11
High-manganese carbon steel	1541

Source: Company reports

Products offered by the company

Product divisions	Products
Seamless pipes	- Stainless steel seamless pipes - Super-alloy seamless pipes - Titanium seamless pipes - Nickel alloy seamless pipes
Long products	- Billets, round cornered square, ingots, hot-rolled black bars - Bright bars, round bars, square bars, hexagonal bars, bright bars - Angle bar, flat bars, Pump shaft quality bar - Wires, wire rods threaded bars
Engineering products	- Flanges - Stub ends - Drawing components

Source: Company reports

JJL's product portfolio features a wide range of seamless pipes manufactured from high-quality materials such as stainless steel, super alloys, titanium and nickel alloys. The company also produces a variety of long and engineering products in various materials, including stainless steel, duplex steel, nickel alloy, age-hardened steel, carbon steel, super alloys and alloy steel. These products encompass a broad spectrum of shapes and sizes, including billets, ingots, hot-rolled bars, bright round, hex, square, threaded, flat, angle bars and machined flanges.

Following are the key companies of the group:

Major group companies

Jay Jagdamba Limited	Jay Jagdamba Profiles Private Limited	Wholly owned subsidiary
	Jay Jagdamba Forgings Private Limited	Group company
	Shree Jay Jagdamba Flanges Private Limited	Group company

Source: Jay Jagdamba Limited

Operational overview

Process-wise production capacity

Process	Products	Production capacity (TPA)
Melting process	Billets/ingots	84,000
16" Rolling mill	Rolled bar	54,000
12" Rolling mill	Rolled bar	24,000
Bright division	Bright bars/bright wires	96,000
Flanges	Flanges/stub ends	8,400
Seamless pipes	Seamless pipes	29,450

Source: Jay Jagdamba Limited

The company has a seamless pipe manufacturing capacity of 29,450 TPA.

Product-wise volume and revenue

Products	FY24		FY25		FY26	
	Sales volume (MT)	Sales value (Rs million)	Sales volume (MT)	Sales value (Rs million)	Sales volume (MT)	Sales value (Rs million)
Billet/ingot	28,788	6,488	33,452	8,093	35,034	8,061
Rolled and bright products	19,687	7,046	13,101	11,018	22,115	19,021
Flange	645	338	878	390	1,575	992
Seamless pipe	-	-	484	138	3,261	1,464
Other	1,830	259	1,587	623	941	70
Total	50,950	14,131	49,502	20,262	62,926	29,609

Source: Jay Jagdamba Limited

Management profile

Profiles of the directors

Narayan Prasad Malpani is the Chairperson and a whole-time Director of Jay Jagdamba Limited. He passed the eighth grade from Shri Sanskrit Vidyalaya in 1966. He ventured into the steel sector when he incorporated Jay Bhavani Metals Private Limited and thereafter acquired the Company. He has 26 years of experience in the steel industry and plays an instrumental role in providing market insights and strategic direction to the Company, leveraging his expertise to navigate industry challenges and opportunities. He also oversees the operations of the Company.

Ramprakash Narayan Prasad Malpani is the Managing Director of Jay Jagdamba Limited. He passed his higher secondary examination held by Assam High Secondary Educational Council, Guwahati, in 1996. He ventured into the steel sector when he incorporated Jay Bhavani Metals Private Limited and thereafter acquired Jay Jagdamba Limited. He has 26 years of experience in the steel industry. His key responsibilities involve strategic leadership, business growth and expansion, operational management, financial oversight, stakeholder relations, corporate governance and compliance, team leadership and culture development, innovation and sustainability, risk management and board and executive communication.

Ashutosh Omprakash Malpuria is a whole-time director of Jay Jagdamba Limited. He passed his higher secondary examination held by the Maharashtra state board in 1991. He was previously associated with Filatex India Limited as a site manager and with Agio Pharmaceuticals Limited as a purchase co-ordinator. He has been associated with the Company since October 3, 2017, and oversees its liaising and business development activities.

Gopikrishna Dharmavaram is a non-executive independent director of Jay Jagdamba Limited. He earned a Bachelor of Engineering degree from University of Burdwan in May 27, 1983, and a master's degree in technology in the interdisciplinary programme of materials science from Indian Institute of Technology Bombay on November 4, 1985. He also earned a Master's in Business Administration from Osmania University on December 8, 2000. He has over 36 years of experience in the marketing sector. He was previously associated with Mishra Dhatu Nigam Limited as a general manager (production and marketing). He has been associated with the Company since November 16, 2024.

Dilip Jagdish Pendse appointed as a Non-Executive, Independent Director of the Company, holds a Certificate of Membership from the Institute of Chartered Accountants of India since September 1992 and a Certificate of Practice since February 2025. He was previously associated with SVC Co-operative Bank Limited as Chief Operating Officer and has over 17 years of experience in the banking sector. His responsibilities include strategic oversight, corporate governance, financial oversight, risk management, regulatory compliance, and providing advisory role. He has been associated with the Company since October 18, 2025.

Priyanka Gupta is a Non-Executive, Independent Director of the Company. She holds a Master of Commerce degree from Jiwaji University, Gwalior since January 31, 2008. She also holds a certificate of membership and a certificate of practice from the Institute of Chartered Accountants of India since June 8, 2018 and has completed the post qualification course in Information Systems Audit (ISA) from the Institute of Chartered Accountants of India on March 30, 2016. She has also completed Institute of Chartered Accountants of India certificate courses on GST in 2022, Concurrent Audit of Banks in 2021 and Forensic Accounting and Fraud Detection in 2017 and has been involved in the statutory audit of State Bank of India and stock audits of ICICI Bank Limited. She is a partner at M/s. Gupta Priyanka and Co and has over 13 years of experience in the audit and accounting sector. Her key responsibilities include strategic oversight, corporate governance, financial oversight, risk management, regulatory compliance and advisory role. She has been associated with the Company since February 17, 2026.

Infrastructure details

The company's infrastructure details are as follows

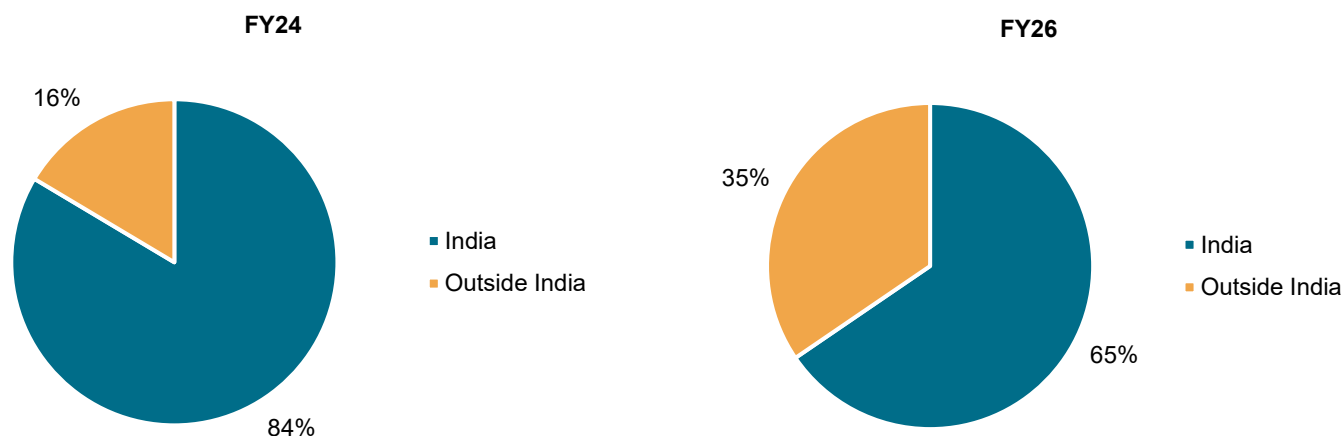
SN.	Manufacturing Facility	Address	Area (in sq mt)	Usage	Ownership	Products	Installed capacities (MTPA)
1.	Manufacturing Facility I	Land and building situated at gut no. 92/3, 46/2, 422, 433	71,040	Jay Jagdamba Limited factory land	Jay Jagdamba Limited	Billets/ingots, rolled bar, bright bars, flanges, seamless pipes	Melting- 84,000
		Gut no. 424 at Abitghar Tal Wada District: Palghar	15,500		Leased by Mr. Narayan Prasad Malpani to Jay Jagdamba Limited		Rolling mill- 78,000
		Gut no. 44, 45, 46/1/2, 58/2 at Abitghar Tal Wada District: Palghar	29,100		Leased by Jay Bhavani Ispat Pvt Ltd to Jay Jagdamba Limited		Bright bars- 96,000 Flanges- 8,400 Seamless pipes- 29,450
2	Manufacturing Facility II	Gut no. 425 Wada Shahapur Road Village Abitghar District: Palghar (Old gut no 44 46/2 60)	14,500	Jay Jagdamba Profile Limited factory	Leased by Jay Bhavani Metal Pvt Ltd to Jay Jagdamba Profile Limited		

Source: Jay Jagdamba Limited

Jay Jagdamba Limited has achieved forward integration from melting to seamless pipes, a high-demand product, will be the most value-added offering, driving growth.

Existing footprint in the market

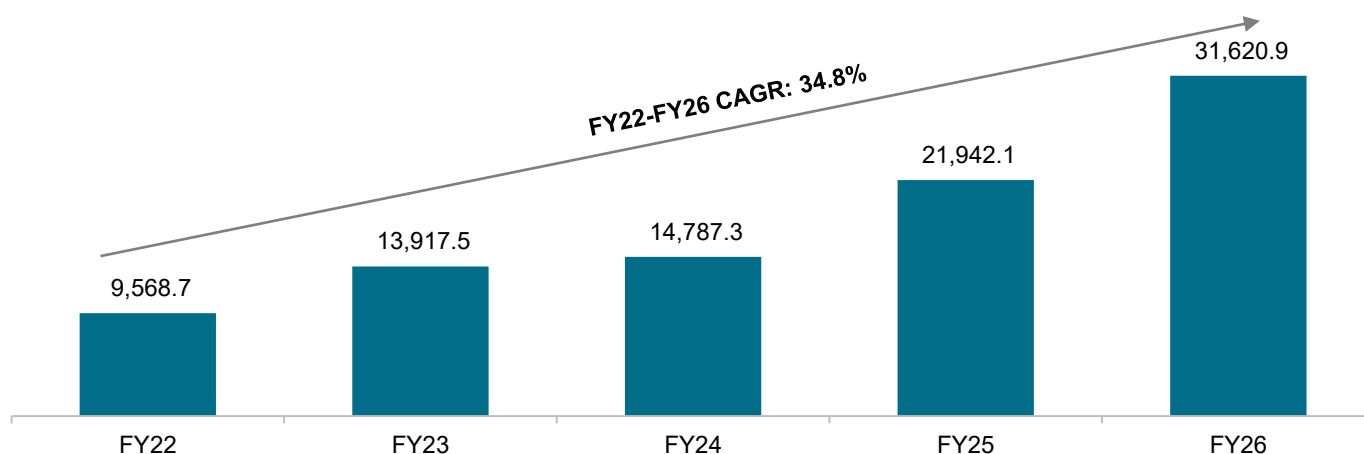
Revenue by geography (%)



Source: Jay Jagdamba Limited

Past performance review

Operating income (Rs million)



Source: Jay Jagdamba Limited, Crisil Intelligence

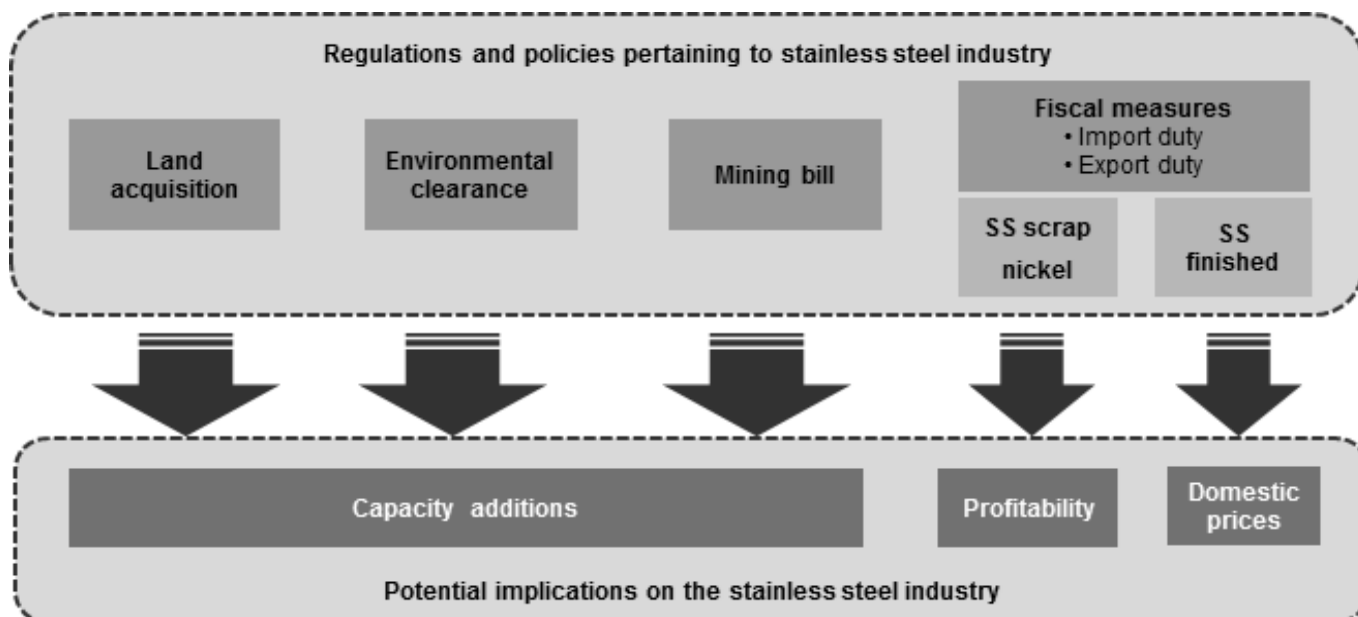
Diversification of product portfolio

JJL has expanded its product portfolio with the introduction of a new range of seamless pipes, manufactured from high-quality materials such as stainless steel, super alloys, nickel alloy and titanium. These pipes are produced in a range of sizes, from 12 mm to 350 mm, catering to the specific needs of the oil and gas, power generation and chemical processing industries.

Regulatory environment

The Indian stainless steel industry is broadly governed by regulations pertaining to the steel industry, along with fiscal and trade remedial duties laid down by government from time-to-time.

Regulatory framework for the stainless steel industry



Source: Crisil Intelligence

Companies must obtain the necessary clearances for new as well as expansion projects through a predefined regulatory process. The clearances related to land acquisition, mining, environment and forest often lead to the project delays, affecting their commercial viability. The amendments to MMDR Act and Mineral Auction Rules have improved the access to raw materials for domestic players through transparent competitive bidding. Further, the government is making efforts to reduce delays pertaining to environmental and forest clearances.

With a focus on domestic manufacturing, the government intervenes to regulate stainless steel prices and ensure availability of stainless steel products through various fiscal measures. The government imposes various trade remedial and import duties to reduce imports and safeguard domestic players from highly competitive global manufactures.

As a stainless steel manufacturer utilising scrap, Jay Jagdamba Limited is not directly affected by mining regulations. However, it is worth noting that the regulatory environment for mining can affect the broader industry.

Basic customs duty

In the Union Budget for fiscal 2025, the government slashed the import duty on ferro nickel to 0% from 2.5%. This reduction is a major boost for domestic manufactures through increase in access to critical raw materials in stainless steel manufacturing, resulting in a cost advantage and competitive pricing with global players.

Steel and Steel Products (Quality Control), 2024

In February 2016, the Ministry of Steel implemented the Quality Control Order (QCO) for stainless steel flat products to safeguard consumer interest and banned substandard or defective steel products (both domestic and imports). In due course, stainless steel products were merged into Steel and Steel Products QCO, 2024. This order captured standards for stainless steel bars, flats, blooms, billets, slab, plate, sheet, tubes, pipes, wire and strip.

However, the domestic manufactured steel and steel products conforming to any other specification required by foreign buyers for export are exempted.

Each product specified under this Order must adhere to the corresponding Indian standards, effective immediately upon implementation, and be accompanied by a test certificate with the standard mark issued by a certified manufacturer under the Bureau of Indian Standards.

Such fiscal measures and standards continue to promote quality supply and access to stainless steel products in domestic markets. QCO prohibits the manufacture, import, storage, sale and distribution of stainless steel products by trade and industry without BIS registration.

SWOT analysis

S

- Established history
- Leading manufacturer of stainless steel long and engineering products
- Diversified customer base and strong customer relations
- Experienced management
- Quality assurance and bespoke manufacturing
- Wide product bouquet
- Strategic location
- Business cycle agnostism
- Risk management

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- Long working capital cycle
- High Operational Dependence on Manufacturing Facilities
- Underutilization of Manufacturing Capacity
- Criminal Proceedings Involving Promoters
- Lack of Long-Term Supply Agreements
- High Supplier Concentration Risk
- FEMA Compliance Deficiencies
- Raw Material Price Volatility and Supply Risk
- Revenue Dependence on Limited Product Categories
- Vulnerability to Utility Disruptions
- Geographical Concentration Risk

O

- Export market expansion
- Export Promotion Capital Goods (EPCG)
- Package Scheme of Incentives, 2013
- Sales and network expansion
- Stainless steel industry outlook
- Seamless pipes outlook

T

- Skilled labour requirement
- Tariffs, anti-dumping and countervailing duties
- Rising costs of raw material and supply disruptions
- Economic downturn
- Competition
- Global market trend

Source: Jay Jagdamba Limited., Crisil Intelligence

Key strengths

The strengths that collectively underscore Jay Jagdamba's capability to deliver high-quality products and services, supported by advanced technology and efficient operations, are as follows:

- **Established history**

The company has been manufacturing stainless steel for 20 years and has a track record of growth and profitability

- **Leading manufacturer of stainless steel long and engineering products**

The company is one of India's leading manufacturers and exporters of stainless steel long and engineering products in terms of revenues as of March 31, 2026

- **Diversified customer base and strong customer relations**

The company's diversified customer base of over 400 clients across various industries mitigates sector-specific risks. Its negligible bad debts and strong relationship with resourceful customers can lead to larger orders. As a recycling plant, it maintains a symbiotic relationship with SS stockists and distributors, consuming generated scrap and enhancing downstream manufacturers' cost efficiency. This strategic positioning fosters a mutually beneficial ecosystem, driving business growth and stability

- **Experienced management**

Seasoned promoters and management team with extensive knowledge and network in the steel and engineering industry

- **Quality assurance and bespoke manufacturing**

The company ensures high-quality products through its NABL-accredited QA lab and mill, AS9100D and ISO 9001:2015 certifications, while bespoke manufacturing capabilities foster customer loyalty and flexibility, enabling tailored production to meet diverse customer needs

- **Product bouquet**

An extensive product portfolio offers a range of stainless steel grades, catering to diverse customer needs and industries. This strategic diversification provides revenue visibility, mitigating risks associated with customer or industry-specific downturns. The company's marketable products, including the newly introduced special flanges, enable entry into the piping market, further expanding its customer base and revenue streams

- **Strategic location**

Access to ports, national highways, major cities, and airports, facilitating logistics and meetings

- **Unique selling propositions (USP)**

The company's USP is in its ability to accept orders with a range of SKUs in smaller MOQs, offering flexibility in production. The company's agile production capabilities enable optimised processes for larger quantities, while smaller quantities can be delivered at a lower price with a longer lead time or vice versa, catering to diverse customer needs and preferences.

- **Business cycle agnosticism**

The company's production flexibility and ability to purchase SS scrap reduce its vulnerability to industry-specific downturns. With a network of more than 400 stockists and distributors serving thousands of midstream and downstream processors, the company benefits from a diversified revenue stream. As industries cycle through ups and downs, the company's distributor base rotates, ensuring a consistent revenue flow. This business model makes Jay Jagdamba cycle-agnostic, allowing it to thrive in various market conditions, while its flexible MOQs and SS scrap purchasing capabilities further mitigate risk and enhance resilience. This diversification ensures long-term stability and growth

- **Risk management**

No commodity price risk or inventory obsolescence due to production against firm orders

Key weaknesses

- **High Operational Dependence on Manufacturing Facilities**

The Company's business operations are heavily reliant on its manufacturing facilities. Any unexpected shutdown or slowdown at these locations could materially impact its business continuity, profitability, margins, and overall financial health.

- **Underutilization of Manufacturing Capacity**

The Company may face challenges in effectively utilizing its manufacturing capacity or optimizing its product mix, which could negatively impact its future prospects and financial performance

- **Criminal Proceedings Involving Promoters**

The Company's Promoters, Narayan Prasad Malpani and Ram Prakash Malpani, along with certain members of the promoter group, are involved in criminal proceedings and is under investigation by regulatory authorities such as the Economic Offences Wing and the Enforcement Directorate. Any adverse developments could harm the Company's reputation and operations

- **Lack of Long-Term Supply Agreements**

The Company has not entered into definitive long-term agreements with most of its suppliers. This exposes the Company to risks related to pricing volatility and potential supply chain disruptions.

- **High Supplier Concentration Risk**

The Company depends significantly on its top 10 suppliers for raw materials. Any disruption in supply from these key vendors could materially impact production and operational efficiency.

- **FEMA Compliance Deficiencies**

There have been past delays in compliance with FEMA regulations related to the reporting of securities transfers. Compounding applications have been filed with the RBI and are currently pending. This exposes the Company to potential regulatory penalties and reputational risk.

- **Raw Material Price Volatility and Supply Risk**

The Company's key raw materials—including stainless steel scrap, ferro alloys (nickel, chromium, molybdenum, titanium)—are subject to price fluctuations and supply uncertainties. Any increase in costs or shortages may adversely affect profitability and financial performance.

- **Revenue Dependence on Limited Product Categories**

A substantial portion of the Company's revenue is derived from rolled and bright products and billet/ingots. A decline in demand for these categories, or failure to diversify product offerings, could negatively impact revenue, growth prospects, and margins.

- **Vulnerability to Utility Disruptions**

The Company's manufacturing operations are susceptible to shortages or disruptions in essential utilities, which may lead to increased production costs and operational inefficiencies.

- **Geographical Concentration Risk**

The Company's manufacturing facilities and a significant portion of its revenue base are concentrated in Maharashtra. Regional disruptions—economic, political, or environmental—could disproportionately affect the Company's business and financial results

Key opportunities

- **Export market expansion**

Jay Jagdamba Limited has secured a credit insurance cover of Rs 500 crore from the Export Credit Guarantee Corporation of India (ECGC), with a limit of Rs 50 crore for most clients. The company plans to selectively enhance this limit to Rs 60 crore for its top three clients, thereby optimising its credit risk management and expanding its business opportunities with key customers

- **Export Promotion Capital Goods (EPCG)**

The EPCG scheme is a flagship initiative under India's foreign trade policy, aimed at enhancing export competitiveness by facilitating the import of capital goods at concessional or zero duty rates. In return, importers undertake specific export obligations, typically six times the duty saved, to be fulfilled within six years.

For companies in specified sectors or regions, the export obligation may be reduced to 75% of the standard requirement. The EPCG scheme promotes export-led growth, enabling manufacturers to access modern technology and machinery, and contributing to India's foreign exchange earnings and economic development.

The company has harnessed the benefits of the EPCG scheme, strategically utilising it to import machinery and by securing advance licenses under this scheme, the company has been able to reduce its capex and allocate resources for innovation, quality enhancement and market expansion. By capitalising on these benefits, Jay Jagdamba Limited is well-positioned to maintain its competitive edge, drive business growth, and contribute to India's export-led development

- **Package Scheme of Incentives, 2013**

Under the Package Scheme of Incentives, 2013, being located in a D+ zone, Jay Jagdamba Limited benefits from several incentives aimed at promoting industrial development in less developed areas. These include substantial capital subsidies, making it easier to set up operations with reduced financial strain. Tax incentives such as exemptions or deferrals on VAT and SGST are also available.

Jay Jagdamba Limited has been recognised as a mega project by the government of Maharashtra, qualifying for a 100% subsidy under Packaged Scheme of Incentive Program in the form of a state GST refund for all capex, including soft costs. The company has already received Rs 11.86 crore in fiscal 2024, Rs 24.77 crore in fiscal 2025 and Rs 37.54 crore in fiscal 2026

- **Sales and network expansion**

The company has developed a strategic roadmap to increase sales of high-margin items such as flanges and explore new business opportunities in European and American markets. With the successful commissioning of its high-value-added flanges division on December 31, 2023, the company is poised to benefit from improved operating margin. To drive growth and expansion, a specialised sales team and strategic partnerships have been established to target the European and American markets, focusing on high-value-added products and enhancing the company's competitive position.

- **Stainless steel industry outlook**

The demand for stainless steel products is expected to have clocked a CAGR of 14.4% during fiscals 2021 to 2026 to rise from 2.4 MTPA in fiscal 2021 to 4.7 MTPA in fiscal 2026, led by government initiatives to augment urban structural infrastructure and increasing disposable income. Going forward, the demand for stainless steel products is projected to increase to 6.7-7.3 MTPA in fiscal 2031 at a 7-9% CAGR over fiscals 2026 to 2031 on a high base. The growth would

primarily be led by rising demand from various sectors, including consumer goods and durables, such as kitchen appliances, tableware, and home décor; industrial sector; construction and infrastructure sector; and automobile sector

- **Seamless pipes outlook**

Going forward, the demand for seamless pipes is projected to increase in India due to certain barriers including anti-dumping duty on Chinese suppliers which are imposed by the government of India, requirements for BIS certification in imported stainless steel mother hollow and seamless pipes. The projected increase is from 0.17 MTPA in fiscal 2026 to 0.24-0.26 MTPA in fiscal 2031, at a 7-8% CAGR during the period on a high base.

Key threats

- **Skilled labour requirement**

The company faces a significant threat in recruiting and retaining skilled labour for high-temperature metal production. The scarcity of trained and experienced workers may lead to increased labour costs, reduced productivity and compromised product quality

- **Tariffs, anti-dumping and countervailing duties**

Changes in regulations, taxes or policies may affect the company's operations or profitability. The company's export products may be subject to tariffs, anti-dumping or countervailing duty proceedings, potentially increasing costs or restricting market access

- **Rising costs of raw material and supply disruptions**

The company is vulnerable to increases in raw material, energy and transportation expenses, which may be exacerbated by supply chain disruptions. These factors can negatively impact profitability, reduce competitiveness and compromise the company's ability to meet demand

- **Economic downturn**

The company is exposed to the risk of economic downturns, which can lead to reduced demand for stainless steel products, decreased revenue and lower profitability

- **Competition**

The stainless steel manufacturing industry is highly competitive, which may put downward pressure on prices, impact profitability and decrease market share

- **Global trend**

The company is susceptible to shifts in global market trends, including changes in trade policies, tariffs and customer preferences. These trends can impact its exports, reduce demand for certain products and compromise profitability

About Crisil Intelligence (formerly Market Intelligence & Analytics)

Crisil Intelligence is a leading provider of research, consulting, risk solutions and advanced data analytics, serving clients across government, private and public enterprises. We leverage our expertise in data-driven insights and strong benchmarking capabilities to help clients navigate complex external ecosystems, identify opportunities and mitigate risks. By combining cutting-edge analytics, machine learning and AI capabilities with deep industry knowledge, we empower our clients to make informed decisions, drive business growth and build resilient capacities.

For more information, visit Intelligence.Crisil.com

About Crisil

Crisil is a global, insights-driven analytics company. Our extraordinary domain expertise and analytical rigour help clients make mission-critical decisions with confidence.

Large and highly respected firms partner with us for the most reliable opinions on risk in India, and for uncovering powerful insights and turning risks into opportunities globally. We are integral to multiplying their opportunities and success.

Headquartered in India, Crisil is majority owned by S&P Global.

Founded in 1987 as India's first credit rating agency, our expertise today extends across businesses: Crisil Ratings, Crisil Intelligence, Crisil Coalition Greenwich and Crisil Integral IQ.

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