

Mr. Sachit Jain

Chairman & Managing Director of Vardhman Special Steels Ltd

In an exclusive conversation with the MetalGround team, Mr Sachit Jain, Chairman & Managing Director of Vardhman Special Steels Ltd, shares his insights on the evolving landscape of India's speciality steel sector. Under his leadership, Vardhman Special Steels has significantly expanded its production capacity and strengthened its technological capabilities through strategic partnerships. In this interview, Mr Jain discusses the challenges, opportunities, and strategic initiatives shaping the future of speciality steels in India, from import substitution and Aatmanirbhar Bharat goals to green steel, advanced manufacturing, and talent development in the industry.



? The government has been pushing Aatmanirbhar Bharat in core sectors. From a speciality steel perspective, what gaps remain for India to become self-reliant in advanced grades and import substitution?

A: So, in the automotive space, and in our space, largely there has been localisation, except for some Korean companies, because of the FTA we have with Korea. Some Japanese companies are also importing, but all those are in the process of localisation. Still, some components are being imported, and those need to be relocated to India, meaning they should be manufactured in India. Additionally, steel consumption in India is also expected to increase.

Now, if you move away from the direct automotive sector of alloy steel parts, I can only give you an idea of the sector, but I'm not present in those other spaces. For example, wire rods and fasteners, I believe, high-quality fasteners are still imported into India, and some high-quality wire rods are also imported due to quality considerations. Unless Indian manufacturers improve their quality and processes, achieving Aatmanirbhar Bharat will be somewhat challenging. These are low-priced items, but highly critical, so quality is very important. So far, what I've understood is that Indian manufacturers are not up to the mark in terms of quality for the really high-end products. That is one area.

Another important gap is in tool and die steels, where India remains weak. Significant volumes of such steels continue to be imported. Similarly,

sectors like defence, aerospace, windmill shafts, and shipping shafts represent areas where import dependence is high and consumption is growing.

To address these gaps, we need to encourage global players to set up joint ventures (JVs) or manufacturing partnerships in India. As the Hon'ble Prime Minister has rightly said, it doesn't matter whose capital is used; what matters is that manufacturing happens in India. Many of the companies with advanced technology in these speciality segments are based in Europe, particularly Germany, France, and Sweden. These are exactly the kinds of players we should be engaging with, encouraging them to form JVs, invest, and manufacture within India. This will be key to making Aatmanirbhar Bharat a reality in speciality steels.

? How do you see demand for speciality and alloy steels in India evolving over the next decade, especially with the automotive, EV, and infrastructure sectors expanding rapidly?

A: I think good times are ahead for the alloy steel industry. Demand is likely to be very strong because the auto market itself is expected to grow significantly, from approximately four million cars to nearly ten million cars, over the next decade. Especially with the current government incentives to reduce GST for smaller cars and two-wheelers, I anticipate a surge in demand from next year. Further, there is likely to be a huge opportunity in automotive component exports too.

With infrastructure being built up, particularly roads, the demand for cars is expected to increase even further. Also, with the infrastructure push through metros, trains, and the general expansion of industry, the need for transportation will increase, which in turn will drive demand for higher-quality steels.

The government is also very serious about green steel. My only request to the government would be that, while we continue to discuss green steel, real change will occur only when we create a demand environment and start encouraging customers, auto OEMs, and white goods manufacturers to specify that a certain percentage of the steel they purchase must be green steel.

Currently, the circular economy primarily focuses on end-of-life vehicle scrap. However, the government should also consider the scrap generated during the manufacturing process of a vehicle. This too should be included in the circular economy concept, so that recycled materials are effectively utilised and environmental goals are met.

As carbon footprint becomes increasingly important, I see two big trends shaping the industry: one is the strong growth in demand, and the other is the increasing focus on carbon footprint, green steel, and circular economy practices. The government has already announced a policy that the carbon footprint of the entire steel industry should be below 2 tonnes of CO₂ per tonne of steel by 2030.

For that to happen, there has to be more encouragement and support for green steel.



? India is still dependent on imports for certain high-end steel grades. What steps are critical for us to compete globally in speciality steels?

A: As I mentioned earlier, we need to secure JV partners to bring in the technology, expertise, and approach, because the market in India alone may not be large enough for a manufacturer to produce these advanced grades only for some of the local markets. You need export linkages as well. Therefore, in this segment, it is imperative to have JVs.

? With the global shift toward EVs and lighter, more efficient vehicles, what new opportunities and challenges do you see for India's speciality steel producers?

A: This is a very good question. With the shift towards EVs, the consumption of special steel per vehicle will drop, but the quality requirements will increase sharply. We will need stronger, lighter, and cleaner steels. The steel per tonne cannot get lighter, but the components can, as better quality steel, heat treatment, and processes allow for the use of smaller components to achieve the same or even higher performance levels.

Cleaner steels, which means higher quality and fewer impurities, will be essential. This requires more technical assistance and process improvements. In this sense, most leading Indian companies already have some form of Japanese investment, joint ventures, or technical collaborations.

For example, JSW has a partnership with JFE, Tata Steel works with

Nippon Steel, ArcelorMittal Nippon Steel India has Nippon Steel as a partner, Sunflag has a JV with Daido, and there is Sanyo Steel, Vardhman Steel, our own company, works with Aichi Steel. All the leading Japanese steel companies are already present in India in some form. These collaborations are critical to bring in advanced technologies, quality standards, and global competitiveness in the speciality steels space.

? With CBAM and other carbon-linked trade policies emerging, how vulnerable are Indian speciality steel exports? Do you believe buyers will pay a "green premium" for low-carbon steels?

A: This is a large and complex subject, so it's difficult for me to comment definitively on whether buyers will pay a premium or not. Personally, I think they should, and in fact, they already are paying a premium to certain suppliers globally.

However, from India's perspective, I don't think the export opportunity for speciality steels to Europe is that significant. In my view, the real opportunity lies in the export of steel components, forged and machined parts, rather than raw steel. That's where India can make a mark.

The government should actively promote and organise trade delegations to countries like Germany, Italy, and France to attract their automotive Tier-1 and Tier-2 suppliers, forging companies, and component manufacturers to India. More joint ventures will also be required.

Every OEM has its own established supply chain, and they are typically more comfortable if their existing vendors decide to set up in India. That's when real supply chain integration can happen.

We've already seen encouraging signs of this shift. BMW and Scania have begun sourcing more from India, and other European companies are actively exploring the country as a sourcing hub. While CBAM has played a role, an even bigger driver has been the surge in energy and gas prices in Europe post the Ukraine-Russia war, as well as demographic shifts. Europe's ageing population, a shrinking workforce, and declining interest among younger people in working on the shop floor are pushing heavy industries to look abroad. This is opening up opportunities for India to position itself as a key manufacturing and component hub for global supply chains.



? Producing high-quality speciality steel often depends on consistent raw material quality. How can India strengthen its raw material ecosystem to support advanced steel production?

A: One of the biggest areas with untapped potential is vehicle scrapping. We've been discussing the vehicle scrappage system for years, but serious implementation is still lacking. If we are genuinely concerned about pollution and resource efficiency, then a nationwide scrappage policy with strict implementation is essential.

If only one state enforces scrapping, older vehicles will simply get sold and moved to another state, defeating the purpose. The current 10-year rule is also quite arbitrary. For instance, a well-maintained Mercedes that meets all emission norms may have to be scrapped after 10 years, even though it's in excellent condition, while far more polluting, poorly maintained vehicles continue to run in other states.

The solution lies in tightening and enforcing emission standards rather than using age as a blanket criterion. If vehicles continue to meet updated standards, they can stay on the road. If not, they must be mandatorily scrapped. Strict and uniform enforcement across all states would generate a steady, high-quality stream of scrap steel.

This would be a major source of clean, consistent raw material for the speciality steel sector. Such scrap, when properly segregated and processed, can significantly reduce dependence on imported raw materials and help support the production of advanced steels in India.

? In speciality steels, customer-specific R&D is critical. How can Indian players invest in innovation, process upgrades, and technology collaborations to close the gap with global leaders?

A: In the automotive speciality steel segment, I don't think there are too many gaps left between Indian producers and global leaders. As I mentioned earlier, the presence of Japanese companies through joint ventures has already brought world-class technology and processes to India. In my view, the Japanese are the best when it comes to automotive speciality steels, and their partnerships with Indian companies have significantly upgraded domestic capabilities.

However, when we move beyond the automotive sector, into non-auto sectors like defence, aerospace, and tool & die steels, there is still a gap. Here, India needs to attract more European companies to either establish 100% subsidiaries or enter into strategic joint ventures. European firms have deep expertise in these advanced steel applications, and their presence can help bridge the technological gap quickly.

Another critical mindset shift required is that Indian companies should be open to giving up majority stakes or have equal partnerships in such collaborations when necessary. If a foreign company holds proprietary technology or specialised know-how, it is unlikely to enter a JV where it does not have meaningful

control. To truly bring in cutting-edge R&D and technology, Indian players need to prioritise learning and capability-building over ownership.

? Advanced steel production requires specialised skills. What areas of talent development should India prioritise?

A: One of the key areas is metallurgy education. Currently, most metallurgy courses in India are concentrated in eastern and western regions, which limits the talent pool for other parts of the country. Students often prefer to stay in the region where they studied, which makes it harder to develop skilled manpower elsewhere.

If regions like Punjab are to be developed as hubs for green steel, it is essential to first strengthen metallurgy courses for engineers. In addition to core metallurgy, training programs should also focus on green steel processes, maintenance, and operational skills required for advanced steel production. Developing such localised talent pipelines will be critical to supporting India's ambitions in speciality and low-carbon emission steels.



? If you had to define three priorities for the Indian speciality steel industry by 2035, what would they be, and how can leadership across the sector drive this transformation?

A: In my view, leadership across the industry is largely company-specific. Each company will operate based on its own strategy, resources, and ambitions, rather than following an industry-wide roadmap. That said, there are some clear priorities for India's speciality steel sector.

First, in the automotive speciality steel segment, the technology and know-how are already largely available through existing JVs with Japanese companies. Here, the focus should be on scaling up production to meet domestic and export demand.

Second, in non-automotive sectors such as defence, aerospace, tool & die steels, windmill shafts, and shipbuilding, there is still significant work to be done. India needs to develop these areas to meet growing domestic requirements and reduce dependence on imports.

Third, Indian companies need to adopt a more open mindset toward foreign partnerships. This means being willing to shed majority stakes if it helps bring in critical technology or expertise, and structuring ownership and management to reflect the relative strengths each partner brings. For example, I once discussed a forging JV with a large Japanese company. They were already present in India with another partner and wanted a JV with majority stake. When I agreed to

be the minority partner and let them retain the majority, they were genuinely surprised, and this was 11 years ago. This kind of openness can accelerate knowledge transfer and industry growth.

One more area I would emphasise is safety and shop-floor culture. Indian management needs to spend more time improving safety standards and enhancing the overall working environment. A strong focus on safety and workplace culture is essential for sustaining growth and creating a professional, high-performing industry.

Overall, the priorities are: scale up automotive speciality steel production, strengthen non-automotive sectors, actively pursue global technology partnerships with an open mindset, and prioritise safety and shop-floor culture.



METAL GROUND

NOVEMBER 2025 EDITION

PRICE ₹1000

Can India Balance Cost and Sustainability?



Mr. Sachit Jain

+ Foresight

Mr. Rajamani Krishnamurti

+ Tête-à-Tête