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Indian Steelmakers to increase capacity in 2024 by +22mpta - Tenova Group aims to contribute with a sustainable Green Wave

**Amitabh Nandi -
Managing Director,
Tenova Technologies India**

■ 'Beneficiation – Technology, Process & Value Addition'

■ Tata Steel announces the winners of the inaugural edition of Ananta Quest

■ SMS Group Enhances Çolakoğlu Metalurji's Strip Production Stability

■ **13th SPECIAL STEELS CONVENTION**

New Trends in Special Steel Sector



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Editorial Desk



D. A. Chandekar
Editor

Dear Readers,

Special steels, crucial in the iron & steel sector, demand profound metallurgical knowledge and expertise. The production and processing of these steels pose steep challenges to metallurgists, technologists and process experts.

Emerging concepts like Micro Alloyed Steels, Digitalization, and Green Steelmaking are reshaping the industry, while developments like EV present potential challenges to its growth. In case of Micro Alloyed steels, though they offer significant advantages like precise properties, elimination of heat treatment process thereby reducing the cost, every company follows the specification of there principal / collaborator adding to the confusion at the customer's end and also adding to inventory carrying cost. I strongly feel that there is a need to prepare a national specification for Micro Alloyed steels. This will not only simplify the process, reduce the number of grades to be handled but also reduce the inventory and it's carrying cost. Ministry of Steel can take up this project with the help of industry experts.

Green Steelmaking , in my opinion, is still at a very preliminary stage not only in India but worldwide. To categorize steel as 'Green', one has to make the complete process chain 'Green', including the sources of power, all the equipment and components etc. This will naturally take a long time. Also, presently there are no proper parameters set for Green steels. A long way ahead !

The Indian economy has performed quite well in the past few years and is expected to continue it's upward journey in the future too. The emphasis on infrastructure development is going to boost the steel demand in the country. The special steels industry is going to benefit from the new scrapage policy. Also the defense is a new emerging customer sector. The present government's policy of 'Make in India' will surely give a forward push to special steel demand in the defense equipment sector. But mind well, supplying to defense is not as easy as supplying to a private OEM. There are lot of hurdles. It requires that the supplier should satisfy many beurocratic procedures and compliances. I hope this long chain will gradually reduce with time and also the volumes would increase. On a long term basis, defense is of course a big consumer of special steels.

'Steelworld' has been organizing the 'Special Steels Convention' for years, fostering dialogue among industry stakeholders. The 13th edition, featuring a full-day webinar saw an active participation from the industry, trade bodies and also the Steel Ministry in this important industry gathering !

Write your comments :

<https://steelworldblog.wordpress.com/>

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CASTING EXCELLENCE, ONE NARROW SLAB AT A TIME!

Two Strand Narrow-Width Slab Caster Commissioned at Madhav KRG HRC Pvt Ltd, Mandi Gobindgarh - India.

In the industrial landscape of Punjab, a trail is set ablaze as Concast (India) commissions its first ever Two Strand Narrow Slab Caster for Madhav KRG HRC Pvt Ltd. This commissioning enhances the productivity of steel production and ensures precision in casting narrow width slabs for further downstream processing. It is a remarkable achievement for Concast (India) in successfully commissioning this Two Strand Slab Caster with a capacity to produce 0.75mtpa.

Elevating Operations: How This Narrow Slab Caster Aligns With The Industry Requirements

This caster is distinguished by features like:

- Ladle Sequence Car With Ladle Cover Manipulator
- Semi Portal Tundish Car
- Plate Type Mould Assembly
- Automatic Mould Level Control System (LevCon)
- Air Mist Cooling
- Hydraulically Clamped Segments In The Bow Area
- Rigid Dummy Bar System
- Dual Torch Cutting Machine
- Turntable In The Discharge Area

Operational Parameters

- **Radius: 8M**
- **Section Size: 150x450mm & 150x620mm**



Customer Requirements:

At the time of order finalization, the customer specified the need to direct charge narrow width slabs into the strip mill. This was facilitated by incorporating a Turntable. To meet the needs of improved operational efficiency, a Rigid Dummy Bar has been included.

Customer Utility:

The major requirement serviced by this caster is to enhance the direct consumption of the 9M length narrow width slabs into the strip mill.

Why Concast (India)?

The customer opted for Concast (India) primarily due to its recognized quality standards & cost-effectiveness in comparison to other suppliers. This decision reflects the customer's trust in Concast (India)'s capability to provide customer-centric solutions without compromising on operational efficiency, fostering a mutually advantageous partnership.



Indian Steelmakers to increase capacity in 2024 by +22mpta - Tenova Group aims to contribute with a sustainable Green Wave

Amitabh Nandi -

Managing Director, Tenova Technologies India



Amitabh Nandi took over as Managing Director, Tenova Technologies India Pvt. Ltd effective 01 May 2023 following an illustrious career of over three decades, spanning impactful roles globally. Prior to joining Tenova group in Jan 2023, Nandi held key management positions during two stints spanning more than a decade leading Corporate Projects at Jindal Steel & Power recently as Executive Vice President and previously as General Manager; as Executive Director- Industrial Planning at Chairman's Office -GFG Alliance in London UK, and as Vice President and BU Head- Flat Rolling Plants at SMS India, besides initial tenures at Knorr & BOC ,after starting his career as MT at Bhilai Steel Plant SAIL in Rail Mill bagged accolades setting-up 6 production and 5 quality benchmarks. Mr. Nandi contributed significantly to the growth and success of Indian steel industry.

D A Chandekar, Editor & CEO of Steelworld had an exclusive interaction with Amitabh Nandi to understand more about the technology gaps in iron & steel sector, Future of Iron & steel sector and future plans of Tenova in India.

Q.1. What in your opinion are the technology gaps with respect to Iron & Steel sector? How is Tenova planning to cater these gaps?

The iron and steel industry is one of the largest emitters of CO₂, responsible for 7% of global direct energy-related CO₂ emissions. The steelmaking industry is moving towards natural gas-based and hydrogen-based iron reduction as substitutes for carbon-based processes. However, current raw materials supply chain shortages and the geopolitical tensions affecting natural gas availability make this transition challenging.

Tenova, a Techint Group company, is a worldwide partner for sustainable, innovative and reliable solutions in the metals and – also through the well-known TAKRAF and DELKOR brands – in the mining industries. In metals, working both upstream and downstream, Tenova strives to innovate continuously for its clients in the metals industries, focusing on quality, energy savings and reducing pollution and CO₂ emissions. Its goal is to favour robust, sustainable

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- ROLLER TABLES
- COOLING BEDS
- CHAIN TRANSFER



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development. To accomplish this, Tenova leverages a network of synergistic companies in order to provide clients with a fully integrated range of high-quality products, technologies and services.

Tenova's portfolio of solutions is mainly dedicated to the sustainable transformation, creating value for clients by providing innovative technologies that ensure efficiency, resulting in better performance, less waste, and lower carbon emissions. Tenova provides technologies that support the transition to cleaner fuels, utilize energy more efficiently, and recover and reuse previously wasted material.

Tenova is fostering a shift in the energy paradigm in the metals industry by promoting the use of hydrogen-ready technologies to its clients for the transformation process of their business.

Q.2. What role is Tenova

set to play in making the steel industry more sustainable worldwide?

From the perspective of a technology provider like Tenova, the priority is to accompany customers into a new, complex (and partly unforeseeable) scenario without compromising their profitability. To take on this responsibility, it is key to have a forward-looking attitude grounded in a profound knowledge of the



industry.

As Tenova, we contribute to creating a net-zero economy in two main ways: on the one hand, directly – by

allowing our customers to abate emissions from production – and, on the other, indirectly – by designing technologies to produce metals needed to enact the energy transition.

Regarding the first point, we offer technologies that help customers phase out emissions, with a progressive approach that guarantees profitability today and sustainability tomorrow.

An example is our ENERIRON® technology (jointly developed with Danieli) for Direct Reduction (DR), using natural gas as reducing agent, which can be partly or totally replaced by hydrogen with no major equipment modifications, allowing customers to gradually move towards carbon-free liquid steel production if using green hydrogen. Tenova's several customers are already producing green steel and several new contracts have also been signed in the last months such as Vulcan Green Steel in Oman, Ternium Pesquería in Argentina, Salzgitter AG, in Germany, just to mention the most recent ones.

The same hydrogen-ready scheme is adopted by our smart combustion systems for reheating and heat treatment furnaces, burning any mixture of natural gas and hydrogen (up to 100%) while maintaining NOx emissions well below the next future strictest limits; thanks to a network of embedded sensors, it is possible to monitor and optimize equipment's performance and efficiency.

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Our sister company Tenaris installed this technology in Dalmine, Italy, and, thanks to the support of a major energy infrastructure company, intends to produce hydrogen on-site, having available the entire chain of technology.

Looking at our indirect impact on the energy transition, E-Mobility would not be possible without silicon steel. Tenova has extensive experience in technologies to produce grain oriented (GO) as well as non-grainoriented (NGO) silicon steel, guaranteeing higher performances in terms of magnetic properties with minor thickness. Big River Steel contracted Tenova to supply the most advanced strip processing line for top-quality non grain oriented silicon steel in the world for its site in Arkansas. Other important players decided to cooperate with us for other grain-oriented steel lines, as we command 100% market share in Europe with lines either supplied or revamped by Tenova – namely THYSSKENCORP installations in France and Germany, STAHLPRODUKT in Poland and APERAM in Belgium and Brazil; besides Europe and South America, Tenova also supplied GO lines to SHOUANGANG, BAOSTEEL and WISCO in China

Q.3. How do you see the Future of Iron & Steel sector? Short term as well as long term?

The key drivers for new investment in the global

steel market including environmental, social and governance (ESG) issues, decarbonization and



sustainability in the production and process for the metals industry are leading new investments and the modernization of existing plants.

The difficult question to answer is how the steel industry will evolve in terms of global trading and geopolitical tensions (regionalization vs. globalization), environmental regulations (not only CO₂, but other parameters as well), access and cost of renewable energy sources (this issue is already surfacing in many countries), access to raw materials (ore and scrap) and few more challenges.

With the level of uncertainties and many possible outcomes, steelmakers will face some fundamental choices that will have a strong impact on their future; this is both exciting and scaring.

All technology suppliers, including Tenova, will probably enjoy a stronger market as part of the

steelmakers' efforts to cope with (or anticipate) the coming changes.

The future market trends for the iron and steel industry, particularly in the context of India, are poised for remarkable transformations. As India sets its sights, India's Crude Steel production is expected to be at 210 MT by 2030, several key factors and innovative technologies are shaping this trajectory.

One of the most significant challenges facing the Indian steel industry is the scarcity of scrap metal, an essential ingredient in steel production. In response to this scrap material shortage, steelmakers in the country are turning to hot metal in their Electric Arc Furnaces (EAFs) as an alternative.

Tenova's holistic approach besides Greensteel solutions for Direct Reduction technology (DRI) to Electric Arc Furnaces (EAFs) Meltshop, encompasses emissions reduction, pollution control, and energy savings, making them a driving force in the industry.

Looking ahead, Tenova anticipates a growing emphasis on emissions management, especially with stricter regulations and environmental concerns. This shift could potentially transform the steel industry into an energy hub rather than just a consumer, with waste heat recovery at its core.

In conclusion, Tenova's innovative technologies and unwavering commitment to sustainability are ready to propel the Indian steel industry

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into a new era of green steel production.

Q.4. What are future plans of Tenova in India?

Tenova has ambitious plans for the Indian market, encompassing both short and long-term initiatives. In the short to medium term, Tenova Technologies Private Limited (the Indian subsidiary) strategy is to focus in the execution of various key projects, such as there vamping of a Tunnel Furnace for Tata Steel Jamshedpur, an Electrolytic Tinning Line(ETL) and a Double Reduction Mill for Tinplate (DCR) in the new Tinplate Complex. New WBF for Arvedi, a Batch Annealing Furnace (BAF) for JSW Precoated in Tarapur, several Roll Shops by Pomini Tenova and the revamp of the Electric Arc Furnace in JSP Raigarh. We are also working closely for GO and NGO Silicon Steel Lines with JSW, TATA Steel and automated Roll Shops

spread across major steel players in India. We are in the bidding phase for silicon steel, where we possess leading references globally.

In the long-term, Tenova Technologies Private Limited strategy is set to expand its presence in the Indian market with a focus on Material Handling technologies, Direct Reduction technology, and to



strengthen its relationship with current key customer for all Tenova products portfolio.

I am also proud to mention that Tenova is part of two of the 13 Task Forces namely "Green Hydrogen & Energy Efficiency" initiated by the Steel Ministry, having taken a central role in hydrogen-based steel making technologies. With our technologies, we can support India's "National Green Hydrogen Mission" to produce 5 mtpa of green hydrogen. It's worth highlighting that Tenova India established a fully developed after-sales and service team, ensuring comprehensive local delivery and offering critical proprietary spares as part of our commitment to the Indian market. ■

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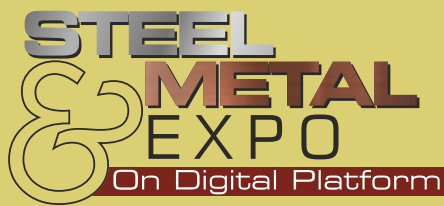
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'Beneficiation – Technology, Process & Value Addition'

The Asian Metallurgy Show, originally a physical exhibition since 1997, transitioned to a digital platform in 2021 due to Covid. The virtual Steel n Metal Expo held from 18th to 31st December, 2023, featured online stands and webinars covering topics like digitalization, commodity trading, green steel production, role of zinc, sustainability. A notable webinar titled 'Beneficiation – Technology, Process & Value Addition'



The expert panel featured **N. S. Rathor**, Consultant, **Priya Ranjan Prasad**, Director, Steel Making, Lloyds Metals & Energy Ltd and **Dr. Suresh Ch. Khattoi**, Managing Director, Minmet Consultants Pvt. Ltd. This webinar was hosted by **D.A. Chandekar**, Editor, Steelworld.

D.A. Chandekar - Over the

past decade, there has been a growing focus on beneficiation, with many companies adopting this process to make the ore usable for various industrial processes, including blast furnaces. Now, let's delve into the discussion on beneficiation. We have esteemed dignitaries and experts present, including N. S. Rathor. N. S. Rathor, could you please share your initial thoughts on this matter? Where does India stand in terms of beneficiation, and are we moving in the right direction? These are the questions I'd like to pose to all of our participants, starting with your opening remarks.



N.S.Rathor - India has neglected its rich iron ore resources, leading to a lag in this area compared to other nations. The adoption of new

technologies is also hindered by the economic considerations of small and medium-sized enterprises. Despite successful ventures in beneficiation, there's a lack of understanding in adopting these technologies due to differing economic calculations between users and sellers. Improving iron ore grade even slightly can significantly reduce the cost of liquid metal production. Another challenge lies in processing weak magnetic materials like hematite and limonite, where companies are exploring methods such as washing and partial reduction to convert them into usable magnetite. These are just initial thoughts, and I'm eager to hear from others for further discussion.



Dr. Khattoi - The urgency to reduce greenhouse gas emissions, particularly highlighted at the recent



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Glasgow Summit, is driving the need for upgrading iron ore for steel production to mitigate emissions. Mineral conservation through reduction roasting and other established technologies is crucial in this regard. Reduction roasting has been successfully implemented commercially, significantly improving efficiency and quality. With a shift towards higher-quality products, such as through advanced beneficiation techniques like gravity and magnetic separation, we aim to meet the increasing demand for iron ore while reducing emissions.



Priya Ranjan Prasad - The concept of utilizing lower-grade iron ore and fines for steel production is gaining traction, emphasizing the need for responsible resource utilization. Other countries, like China, efficiently process lower-grade ore, demonstrating its feasibility. India is also making strides in beneficiation, with some projects underway. However, challenges remain, particularly in managing tailings and securing land for disposal. Innovative solutions and research are crucial to scaling up

beneficiation efforts and maximizing resource utilization for national development.

D.A.Chandekar -

Beneficiation, coupled with pelletization, is indeed the way forward, as you mentioned. China's leadership in this area is evident, despite their significant reliance on imported iron ore. They've managed to export steel efficiently, even with low-grade ore. This raises the question of whether we should explore using low-grade iron ore in our furnaces and develop processes accordingly. While beneficiation and pelletization are essential, innovation towards accepting low-grade ore in furnaces, as China has done, should also be considered to reduce energy and time in steelmaking.

Dr. Khattoi - China does possess magnetite reserves, although they're not fully utilizing them at present and are relying on imports. It's crucial for us to strategize and capitalize on such resources rather than relying solely on imports. Additionally, directly reducing low-grade ore is technically feasible. However, we need to focus on minimizing energy consumption, especially when dealing with impurities like silicon and alumina, which can significantly affect economic viability. Our policies need to evolve to incentivize beneficiation and discourage transporting unnecessary impurities. Royalties should

be levied based on the actual grade of the ore to encourage efficient resource utilization.

N.S. Rathor - In China, beneficiation plants primarily process low-grade magnetite and hematite ores, upgrading them to higher grades for steelmaking. They also utilize fines efficiently by converting them into pellets, optimizing furnace operations. Despite the effectiveness of these methods, India faces challenges in adopting similar practices, including regulatory hurdles and reluctance to embrace new technologies. Additionally, there's a shortage of skilled manpower in the beneficiation industry, exacerbated by the lack of relevant education and training programs. Efforts to address these issues, such as establishing training centers within industries, are essential for the sector's growth and competitiveness.

Priya Ranjan Prasad -

There's potential in processing high-grade dumps into pellets, enhancing commercial viability. Standalone pellet plants could also increase viability by integrating beneficiation units, improving recoveries and yields. It's essential to adopt a broader perspective, focusing on



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Analysis

utilizing various grades of iron ore effectively, including lower grades like BMQ and BHQ, which can be upgraded to high-grade products with considerable silica content, suitable for construction purposes.

D.A.Chandekar - In discussing the challenges, it's evident that technological, commercial, and policy hurdles exist. Addressing policy challenges requires government intervention, such as establishing pilot plants through institutes like the National Institute of Secondary Steel Technology. Additionally, soft financing should be made available for projects aimed at converting low-grade ores into valuable resources. Government-backed initiatives could include postgraduate courses in beneficiation and pelletization, fostering industry growth and national benefit.

N.S.Rathor - On the manpower front, there's a pressing need for proper evaluation of degrees, as the current system often produces graduates whose qualifications don't align with their actual skills. The declining quality of education, exacerbated by various examination processes, is a policy issue that must be addressed nationally. Soft financing for beneficiation and pelletization projects is crucial for industry development, yet there's a lack of interest from

companies. Technologies like direct reduced iron (DRI) plants, which efficiently utilize heat energy and boost productivity, are available but underutilized in India, despite their economic viability. Despite China's successful adoption of such technologies, India has been slow to follow suit, highlighting the need for greater attention to technological advancements



and industry uptake.

Priya Ranjan Prasad - There are some positive policy changes underway regarding beneficiation, with a team of experienced individuals working on draft recommendations. Soft financing is available for projects like mine development, as seen in my own experience. Despite the availability of technology, funding, and supportive policies, there seems to be a lack of interest or disinterest in investing in beneficiation projects. This could be due to a preference for shortcuts or a reluctance to embrace necessary changes. However, the reality is that high-grade resources are

becoming scarce, and investing in beneficiation is crucial for sustainable development.

Dr. Khattoi - Exporting minerals without value addition should not be the norm; instead, any exports should be balanced with imports to meet India's strategic needs. Compelled exports must be done cautiously, considering environmental implications like carbon footprint. China imports

due to lack of resources, while India needs to prioritize domestic beneficiation for infrastructure and employment generation. Unlike resource-rich countries like Australia, India's focus should be on domestic steel production, with only a fraction

available for export.

D.A.Chandekar - The Indian growth story revolves around infrastructure development, with steel playing a central role. Without a strong foundation of steel, the economy cannot grow. We discussed various challenges in beneficiation, including technological, financial, commercial, and policy-related issues. It was emphasized that minerals should not be exported without value addition. Some topics are beyond the industry's scope and should be handled at a different level. Gratitude was expressed to all participants for their valuable insights and time.



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Tata Steel announces the winners of the inaugural edition of Ananta Quest

Tata Steel announces the winners of the first edition of Ananta Quest, a one-of-its-kind case study competition specifically designed for students with disabilities from technology and business schools across India. The jury selected three winning teams out of the 11 teams that made it to the grand finale.

Team 'Alchemist' from IIM Trichy was declared the winner of the competition. While team 'Madras' from IIT Madras secured the runner-up position, team 'Universe' from IIT Kharagpur and ISM Dhanbad bagged the second runner-up spot. The finale and the prize distribution ceremony was held with great fanfare in Jamshedpur

on March 15, 2024, and was attended by students and senior leadership from Tata Steel.

The three winning teams were awarded cash prizes of Rs 50,000, Rs 30,000 and Rs 20,000 respectively. All the 14 finalists from across 11 teams will be offered a paid internship or pre-placement interview opportunity with Tata Steel, depending on their academic year.

Atrayee Sanyal, Vice President, Human Resource Management, Tata Steel, said: "The success of the debut edition of Ananta Quest highlights our commitment to being an equal opportunity employer. The enthusiastic participation and determination of these amazing students is a great

source of inspiration for all of us. This event serves as a clear demonstration of our focus on cultivating a diverse and inclusive workplace. On behalf of everyone at Tata Steel, I would like to congratulate the winning teams and thank everyone who participated and made this competition a grand success."

Ananta Quest has been designed to serve as a platform for final-year students and freshers with disabilities to showcase their skills and ideas, thus bridging the gap between academia and industry. The debut edition saw more than 550 registrations and 160 case submissions from technology and business schools from across the country, including IITs and IIMs.

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Special Steel in India: Prospects & Hurdles

I see future of special steel in India very promising & value contributor on account of India becoming global player in almost all sectors. The growth potential is immense and domestic consumption will increase significantly while realizing vision of multi trillion economy in next 2 decades. Per capita steel consumption will increase multifold and is expected to be 160 Kg by 2030 from current level 87 kg. It indicates that there is scope of additional steel capacity required. Special steel which is 5 to 6 % of total steel consumption will also see huge jump in demand though with different product mix. and therefore, current excess capacity of

alloy plant will be compensated partly & that too in low critical applications. Additional capacities with high grade steel are needed for new & critical applications in emerging strategic sectors like RE (Wind, Hydro, Nuclear, Solar) Space, Aviation, Defense, Mining, Marine, Shipping, High Speed Train etc.

Govt.'s clear vision to make India a global player through strengthening core competencies & drives like Make-In-India, Local-for-Vocal, AatmaNirbhar Bharat which is visible in various policy initiatives, scheme & incentives. Alongside infrastructure push, govt. is also



Alok Vashishth
Consultant

giving at-most priority for strategic sectors including mining of critical material & others to open for private players. Govt.'s required policy support, subsidy and funding to create growth-eco-systems is commendable. In strategic sectors most of requirements will be in high grade steel & advance specialty steel with very high value which are currently produced elsewhere globally and maximum qty. of it is being imported. It is painful that the impact on annual forex is approx 35000 Cr. and in next decade it will be 2 to 3 times.

Govt push for 100 % import substitution coupled with absolute support through various scheme, incentives to meet all requirements locally, mandate alloy plants to develop thousands of critical



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View Point

components within country. This will be a future ready niche market with demand beyond expectations, giving a lifetime opportunity for alloy plants to move up in value chain. Alloy plant must have one-point-focus to achieve high global competitiveness, build technological edge, bridge gap to meet international standard quality & serviceability.

National Steel Policy, Automotive mission plan, Energy mission, Scrappage Policy, PLI Scheme, Gati-Shakti Master Plan, Freight Corridor, Railways (High Speed Train), Udaan, Gas Pipe line, Inland water ways, Smart cities & countless many more are growth drivers for India's demand to boost in next decades. Alloy plant must align their investment for technological upgradation of existing capacities with at-most-essential automation (in quality control and inspection) and upcoming capacities with advanced steel making practices to produce clean steel of international standard. This will be immensely supportive to build global competitiveness by alloy plants in country. New Eco-system will be technically advanced with intense competition specially from global players.

Currently alloy steel installed capacity is approx. 8.4 million Tonnes (BF-BOF :2.2 million, BF-EAF :4 million & EAF: 2.2 million) against demand of 5.1 million tonnes which is mainly

domestic (Although supplies to few forgers are for export components but direct export to global OEMs are negligible). Strategic solution / utilization of excess capacity by alloy plants will be to engage global OEMs for strategic solution provider otherwise this will remain an un-resolved & lasting issue for alloy plant on how to use capacities. They have to shift focus from commodity grades to high grade steel, from non-critical to high-end-applications and from just being domestic to export hub



like China. This paradigm shift will be like a booster for alloy plant to seize opportunity to move up in value chain and become a strategic partner to global OEM to give sustainable & lasting solutions in new-age-steel demand in strategic sectors. Global OEMs have highlighted their intense greed for guaranteed potential market in India to be created in next decades. Global OEMs are looking for alternate sourcing (post-covid new world order is of high disruption &

fragmentation of supply chain) to their manufacturing plants world over but for that Indian alloy plant has to transform completely for global quality standard. (quality parameter like inclusion level, Homogenous chemistry throughout heat, strict dimensional control, absolute surface finish with aesthetic appeal etc.).

Alloy plant capacities bearing few like Midhani, Star Wire, Saarloha mainly used to produce grades which are now considered commodity like boron steel, FC steel, C, C-Mn, Cr-Mn & even 52100 steels.

China has already declared 2 years back in steel conference to come out of commodity grades (Low-critical applications grades) and stepping into new-age steel grades for new critical sectors/ segments (of at most importance in next 50 years) to create its formidable global hegemony like they

have done in critical material meant for EV sector globally.

Urgent need for alloy industries is to upgrade or develop core competencies keeping 100% import-substitution in focus, enhance economies of scale through efficient process & boost global presence through exports. Factors like localization, import substitution, govt. support, strategic partnership & Global OEMs engagement, India alloy steel must be poised for promising future. ■

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44th foundation day of National Institute of Personnel Management (NIPM) celebrated at RINL



The 44th NIPM Foundation Day Celebrations were conducted by RINL in association with the NIPM-Visakha Chapter at the L&DC(learning & development centre) Conference Hall of Visakhapatnam Steel Plant, today.

Dr. S.C. Pandey, Director (Personnel) & additional charge Director (Finance) RINL and special invitee, National Council, NIPM, was the Chief Guest. Addressing the delegates, Dr. SC Pandey, Director (Personnel) & additional charge Director (Finance) RINL and special invitee, National Council, NIPM congratulated all HR professionals on the occasion of 44th foundation

day of NIPM and called upon the HR Professionals to continuously upgrade their knowledge and skills. Dr SC Pandey congratulated NIPM-Visakhapatnam Chapter for organising various programs towards enhancing knowledge on core Human resources area and other pertinent areas.

Dr. SC Pandey said that this year's Theme "B2B-Back to Basics" holds significant relevance concerning Human Resources as it emphasizes returning to fundamental principles and practices to navigate the complexities of modern workplaces.

Dr SC Pandey was felicitated by the senior office bearers of NIPM on the occasion. Speaking on the occasion, the Guest of Honour Dr Girish Dixit, Executive

Director, M/s Eisai Pharmaceuticals India Pvt Ltd., said that HR Community brings employment, employee satisfaction and employee promotion. HR should take care of employees like mother, Dr, Girish Dixit added.

Other eminent speakers Sri K.V.Rao, GM(Projects), RINL and Dr. P.S. Tagore, Vice-President, M/s Ajinomoto Bio-Pharma, and others also highlighted the importance of NIPM towards HR excellence and opined that this year's Theme "B2B-Back to Basics" is very much relevant to the present scenario of Human Resources. The speakers narrated about the core functions such as Recruitment, Training, Performance Management, and Employee Relations. ■



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13th SPECIAL STEELS CONVENTION New Trends in Special Steel Sector

D.A.Chandekar - Editor, Steelworld - I'd like to discuss digitalization and green steel. Starting with Mr. C H Sharma, I'm keen to hear his thoughts on the rationalization of steel rates and the new trends he's observed in the industry over the past 52 years. His insights will provide valuable

we're facing is inconsistency in meeting export requirements, particularly for stringent grades and zero-defect products. Automation is crucial across processes like secondary metallurgy, ladle refining, and quality inspection to ensure data capture and consistency. Current automation tools like

consistent quality. Today, IT expertise and advanced electronics play a significant role, emphasizing the need for skill integration into automated processes. Standardizing grades and minimizing inventory through automation can benefit manufacturers, forging industry, and end-users by reducing lead times and improving pricing.



context for our discussion.
C H Sharma - Steel Plant Consultant - One key issue

Auto Magna Flux and auto ultrasonic testing are employed, but further automation is needed, especially to produce clean steel with low oxygen levels for critical components. There's a shift towards exceeding specified standards to ensure customer satisfaction, highlighting the importance of automation in maintaining



Vivek Gupta - Head, Long Products, JSW Steel Ltd. - C H Sharma highlights a crucial issue of rationalizing steel grades to meet diverse market demands. Collaboration with international companies leads to fragmented demands across industries, hindering efficiency. Despite stable overall demand and optimism for increased demand in certain sectors, challenges

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persist in transitioning to electric vehicles (EVs) due to concerns about battery replacement costs. However, the demand for commercial and passenger vehicles, particularly hybrid models, remains steady. While infrastructure improvements and economic growth may influence demand, the focus will likely shift towards

defence segment, though complex and requiring specialized suppliers, presents substantial opportunities due to reduced imports and government emphasis on domestic production. Despite challenges like stringent quality requirements and procurement procedures, industry players like JSW and Star Wire are making strides

goods effectively penetrating the defence sector.

Vivek Gupta - In my 17 years of experience, I've encountered challenges in developing the defense sector, despite successful breakthroughs in other areas like railways. The defense sector poses unique hurdles due to bureaucratic processes and stringent requirements, which historically limited our ability to penetrate this market. However, recent changes in government leadership signal a potential shift, making the defence sector more attractive for investment. Setting up dedicated facilities for specialized processes like vacuum induction furnaces and long wire forging is costly and requires substantial volume, which is currently lacking domestically. Additionally, the complexity of defense-grade specifications and the limited market demand discourage private investment. Unlike developed countries where government support drives defense industry growth, in India, there's a reliance on private investment with uncertain returns. I believe a collaborative model, where the government provides financial backing and the private sector contributes technical expertise, would be more effective in developing the defense industry. This joint venture approach would ensure financial security and shared responsibility, accelerating the sector's growth. Relying solely on private investment is not feasible, given the long validation process and uncertainty in commercial



heavier vehicles. Additionally, changes in manufacturing processes, such as the transition away from bright bars, will impact product profiles and supply chains.

in this sector, indicating potential growth in domestic manufacturing for defense purposes. As the government promotes indigenous production and restricts imports through measures like listing specific grades, the defense segment is expected to witness significant growth in the coming years.



Dr. Dhawan - *Director General, Alloy Steel Producers Association* - The demand outlook appears stable across production, demand, and realization fronts, with hybrid models gaining traction over fully electric vehicles (EVs). The

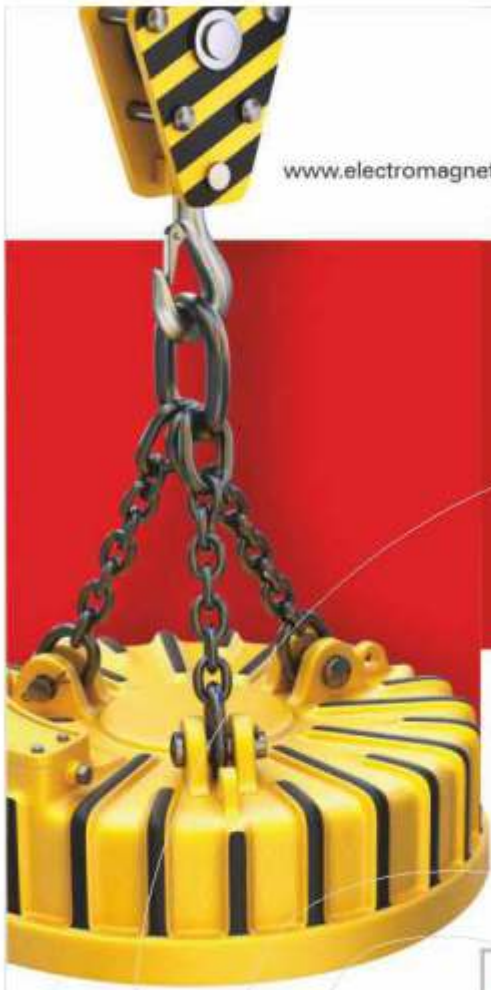
D.A.Chandekar - I acknowledge the government's intention to prioritize indigenous production and reduce dependence on imports in the defence sector. However, achieving this goal is a complex and lengthy process, requiring several years of concerted effort. It may take three to five years before we see significant quantities of domestically produced

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production. Therefore, a collaborative model is essential to foster the development of the defense industry in India.

D.A.Chandekar - One aspect is the production of green steel, which involves



reducing carbon emissions and environmental impact. While there's much discussion on the concept of green steel production, it's unclear if truly green steel is being utilized in practice. I'm interested in understanding if consumers are willing to pay a premium for such steel, and I'd also like to inquire about strategies to address the European border tax initiative.

C.H.Sharma - Before delving into specifics, let me outline the concept of green steel. Green steel aims to reduce carbon emissions, ideally to around 0.2 to 0.3 tons per ton of steel produced. This involves utilizing renewable energy sources like solar, nuclear, wind, or hydro power for steelmaking processes. Additionally, green hydrogen

produced through electrolysis using renewable energy is utilized, while gas-based Direct Reduced Iron (DRI) plants are transitioned to hydrogen reduction. Furnaces and rolling mills are also optimized for hydrogen use. Capturing CO₂

emissions generated during steel production is crucial, although it poses significant challenges and costs. Some initiatives, such as those by companies like Cola Steel, have embraced solar energy to substantially reduce their carbon footprint and energy costs. It's essential to acknowledge that while the steel industry contributes to CO₂ emissions, it's just a fraction of the overall emissions, highlighting the need for broader sustainability efforts across various industries.

Dr. Dhawan - Green steel lacks a universally agreed definition, but efforts are underway globally to establish standards. In India, the government has formed 14 subcommittees involving major steel producers to develop green steel policies.

While several items contribute to pollution, steel remains one of the top polluters. Reduction targets have been set for carbon emissions, with milestones leading to global carbon neutrality by 2070. The transition to green steel involves various measures, including using renewable energy sources and reducing carbon emissions. Electric arc furnace manufacturers utilizing scrap and renewable energy sources are poised to benefit from government support and emission reduction targets. The transition to green steel presents both challenges and opportunities, with hydrogen playing a significant role in emissions reduction. However, demand for green steel and collaboration with industries like automotive manufacturing will shape pricing and market dynamics. Despite challenges, some steel producers have made strides in offering competitive green steel products.

D.A.Chandekar - Tell us about the European proposal to impose a tax on non-environmentally friendly steel products.

Dr. Dhawan - The European Union's proposal to levy taxes on non-environmentally friendly steel products has prompted Indian steel producers to take proactive measures. They have begun reporting data to comply with the proposed standards, signaling their readiness to face the challenge. Several producers have engaged with the government to address concerns about quotas and seek assistance if needed.

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Indian steel companies, including JSW and AMNS, are confident in their ability to meet the EU's standards and are already seeking orders to supply green steel.

Vivek Gupta - One of our major European customers, a significant buyer, has initiated discussions with us about transitioning to renewable energy sources by 2028 or 2029 to meet environmental standards. Negotiations with them have involved exchanging data and discussing pricing. It's become a commercial negotiation where various offers are made, including offers of freebies. Ultimately, the price will depend on demand and supply dynamics, as well as the specific requirements of local regulations and auto manufacturers.

C.H.Sharma - Some in the industry claim to produce green steel by using a portion of renewable energy, say 40%, and labeling that portion as green steel while using conventional energy for the rest. This practice allows them to market their products as green steel, especially for export purposes. It's not uncommon for companies to mix renewable and conventional energy sources in their production processes. They justify this by stating that any emissions are offset by purchasing carbon credits, thereby lowering their carbon footprint. This approach, while not unethical, involves a level of

manipulation in labeling steel as green.

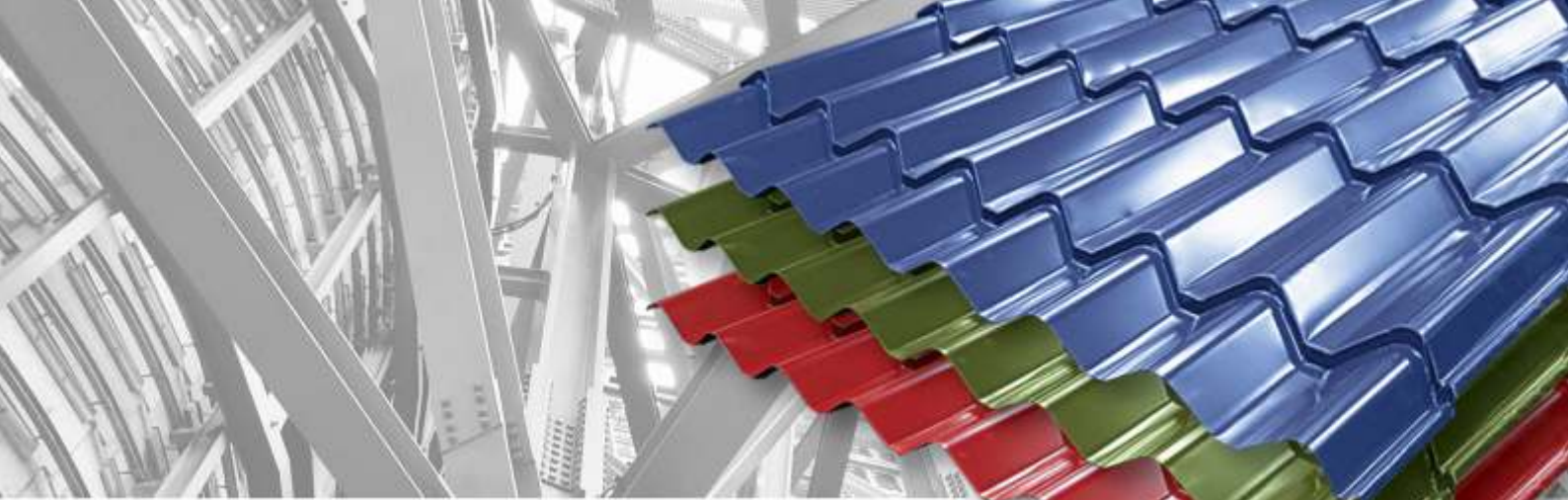
D.A.Chandekar - Let's discuss the Production Linked Incentive (PLI) scheme and its effectiveness in benefiting people. I'm particularly interested in understanding how both PLI1 and PLI2 have impacted steel producers.

Dr.Dhawan - Even if it's not official, I want to emphasize that the grades covered in the allocation for PLI were insufficient. As seen in recent letters and media coverage, our viewpoint on this issue has been clear. While PLI is beneficial, particularly for sectors like defense and aerospace, it requires government assistance. The inclusion of auto sector components in PLI was a positive development. However, certain grades are still awaiting approval at higher levels due to various factors, including the election process. Once approved, PLI will cover a wider range of steel grades, benefiting various industries. Currently, more than 20 companies have signed agreements under PLI, with investments expected to be reported next year. Consulting with specialty steel companies, it's clear that PLI has been viewed positively, although challenges remain.

Vivek Gupta Many companies have applied for inclusion in PLI because they seek to expand the range of grades covered. The process of diversification is challenging due to the need

for specialized infrastructure and government support. Developing new steel grades requires significant research and development, as well as technical expertise. While there is a continuous demand for certain grades, particularly those used in engineering and die industries, entering this market requires patience and willingness to absorb initial losses. The industry requires small-scale, specialized setups rather than large-scale production facilities. Despite the challenges, there is potential for growth and export opportunities, but it will require strategic support and investment from both the government and private sector.

Dr.Dhawan - PLI 1 has been implemented and is currently in progress with various companies at different stages of implementation. PLI 2 has also been issued and is awaiting applications from companies for implementation. The timeline for realizing benefits from these schemes varies for each company but generally spans around five years. Companies must invest, provide data, and demonstrate progress to receive incentives, with the timeline dependent on individual company performance rather than government intervention. Overall, the experience with PLI has been positive, with the focus on self-reliance and reducing imports. ■



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SMS Group Enhances Çolakoğlu Metalurji's Strip Production Stability



SMS group has successfully implemented the technological upgrade of the hot strip mill complex it originally supplied to Çolakoğlu Metalurji for its site in Kocaeli, Türkiye. The upgrade has brought significant benefits in terms of rolling stability and high-quality strip production, especially with regard to strip flatness and coil shape, with less maintenance required in the finishing mill.

SMS group's scope of supply included the integrated strip steering package, consisting of mechanical side guides, roll alignment control strategies, and camera-based measuring systems for real-time feedback on the strip position. Six X-Pact® Sense hotCAMs designed for harsh

environmental conditions, such as high strip temperature, mist, steam, dust, and vibration, were installed on top of the finishing mill stands (F2-F7) to provide a view of the strip on the interstand looper. X-Pact® Centerline Control uses a closed-loop algorithm to calculate any deviation from the strip centerline and provides a levelling correction signal for the mill stands. Various control methods are used for the different rolling sequences (head, filet, and tail end). A smooth transition between the control actions in each individual phase is ensured and the operators are assisted by corresponding visual displays.

As a result, unplanned roll changes are reduced and

rolling stability is improved throughout the hot strip mill. Fewer tail-end problems when rolling thin strip, improved strip surface and strip geometry, especially in terms of the strip wedge, ensure high-quality production. In addition, the low number of rework coils and spare parts significantly reduce maintenance work at Çolakoğlu Metalurji, boosting the productivity levels of the hot strip mill. ■





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How will the EU's CBAM impact global iron and steel?



Nuomin Han

Head of Carbon Markets
Wood Meckenzie

The Carbon Border Adjustment Mechanism has big implications for international trade patterns. While it's an EU regulation, the Carbon Border Adjustment Mechanism (CBAM) aims to encourage decarbonisation at a global level. As the new

rules will affect anyone who exports to the EU, it promises to have significant consequences for international trade.

As per the Wood Meckenzie latest insight, metals and mining sector analysts Nuomin Han, Head of Carbon Markets, Wood Meckenzie set out the details of the Carbon Border Adjustment Mechanism and assess its implications for the iron and steel sector, which is the largest by import value of the six sectors covered by the first phase of the scheme.

What is the Carbon Border Adjustment Mechanism?

The CBAM aims to address the issue of so-called 'carbon leakage'. The EU defines carbon leakage as 'the situation that may occur if, for reasons of costs related to climate policies, businesses were to transfer production to other countries with laxer emission constraints'.¹ The EU looks to address the risk of carbon leakage by taxing imports to equalise the carbon price paid by EU and non-EU products.

What sectors does it cover?

Initially, the CBAM will cover six sectors, with a focus on carbon-intensive and trade-exposed industries that are at the high risk of carbon leakage. These are electricity, hydrogen, cement, fertilisers, aluminium, and iron and steel. Later it will be extended to all sectors covered by the EU's Emissions Trading System (ETS) by 2030. The bloc will also assess whether to extend the mechanism to organic chemicals and polymers by the end of the transition period, and will look at the potential to cover indirect emissions for more sectors and a wider range of downstream products.

When does it come into effect?

- October 2023 – Transitional period: Importers of products covered by the initial scope only have reporting obligations for the purpose of the CBAM
- January 2026 – Financial obligations commence: Importers will face financial obligations

of surrendering CBAM certificates, which will ramp up progressively. Free allowances for CBAM-targeted sectors under the EU ETS will start to phase out.

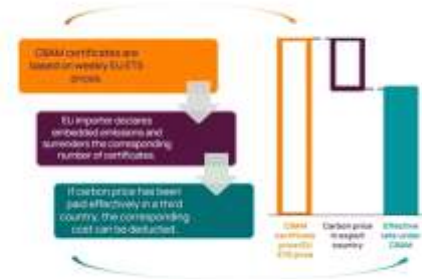
- On or before 2030 – Extension: Regulations will be widened to all sectors covered by the EU ETS
- By 2034 – Full implementation: The CBAM will reach full effect for the initial batch of sectors and allowances will be all allocated via auctions for these sectors under the EU ETS

How will it work?

Until now, industrial installations within the EU considered to be at significant risk of carbon leakage have been receiving free allowances under the EU ETS to support their competitiveness. The CBAM will replace these free allocation, which will be phased out between 2026 and 2034 at the same pace as the CBAM is phased in.

CBAM financial obligations will be determined by the embedded emissions of imported goods and the price of the CBAM certificate, which is based on the EU ETS price. Carbon price effectively paid in the export country can be deducted (see diagram below).

How the price of a CBAM certificate is determined



Why has iron and steel been chosen?

The iron and steel sector is large, trade exposed and emissions intensive, making it a prime candidate for inclusion in the CBAM. European producers face significant competition, with 30% of EU demand for steel basic materials and key intermediates met by foreign supply. Price is a major factor, with EU steel producers facing higher production costs than their foreign competitors. As the energy transition progresses, higher carbon prices will further corrode their competitiveness. Emissions from crude steel production in most of the bloc's major steel trade partners, including China, India and Russia, are notably higher than the EU average, yet none of these countries places a carbon price as high as the EU's. The CBAM is intended to address this discrepancy and create a level playing field for domestic production. The mechanism will cover CO2 emissions from a range of imported products, including pig iron, semi-finished and finished steel, some fabricated steel,



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and downstream items like nuts, bolts and screws.

What will the impacts of the CBAM be?

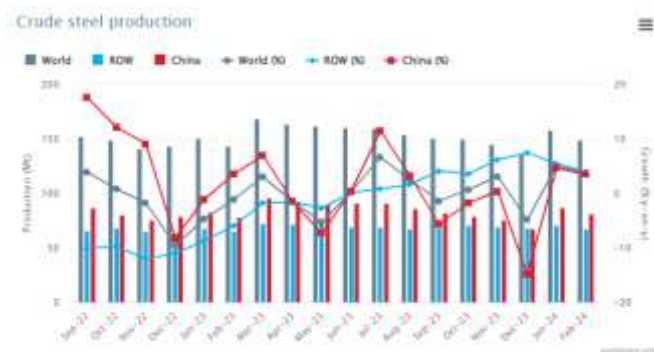
In the long term, the CBAM could lead to global decarbonisation of affected sectors and downstream consumption. However, collateral damage should also be expected.

Cost growth will be moderate in the first few years of the CBAM payment. During this period, exporters to the EU could reorganise their production and sales to direct lower-emissions products to the European market as a short-term fix. However, they may simply avoid the higher cost of operating in the EU market, creating supply shortages. Meanwhile, carbon costs will rise for EU producers as free allowances are phased out.

In the longer term, however, carbon will become an increasingly important cost component to consider. This will eventually impact steel trading patterns and encourage exporters to the EU to invest in emissions reduction technology. At the same time, the bloc's trading partners will be incentivised to introduce or raise their own domestic carbon prices to prevent revenue leakage (although it should be noted that they are likely to remain structurally weaker than the EU's).

On the downside, higher carbon costs and disrupted supplies will impact downstream manufacturing, leading almost inevitably to price increases for both domestic and foreign products. Steel is also widely used for renewable energy applications such as wind turbines and electric vehicles; higher prices and added strain on the supply chain could, therefore, make the energy transition more expensive in the EU than elsewhere.

Global steel output up by 3.7% in February : WSA



Global crude steel production went up by 3.7 per cent in February 2024 to 148.8 million tonnes (mt) against 143.6 mt in the corresponding period a year ago. For the January-February period, production in the 71 nations that account for 85 per cent of world steel output was pegged at 306.9 mt, up 3 per cent.

According to the World Steel Association, top producer

China's output increased to 81.2 mt in February, up by 3.5 per cent from the year-ago period. India reported a surge of 11.4 per cent rise in production at 11.8 mt.

Russian output down

Turkey's production soared 46.6 per cent to 3.1 mt. Iran's production climbed up by 14.3 per cent at 2.2 mt. While output from Russia decreased by 4.4 per cent at 5.7 mt, South Korea's output saw a fall 1.5 per cent at 5.1 mt. Japan's production went up slightly by 1.1 per cent at 7 mt.

The United States saw its output dip by 1.2 per cent while Germany saw its production gain by 4.4 per cent year-on-

Table 1. Crude steel production by region

	Feb 2024 (MT)	% change Feb 24/23	Jan-Feb 2024 (MT)	% change Jan-Feb 24/23
Africa	1.8	8.1	3.7	12.3
Asia and Oceania	109.7	3.9	227.1	2.7
EU (27)	10.8	-3.3	21.1	-0.9
Europe, Other	3.7	32.5	7.6	27.2
Middle East	4.2	10.8	8.9	17.0
North America	8.7	-1.3	17.7	-2.2
Russia & other OS + Ukraine	6.7	-2.5	13.7	-0.7
South America	3.5	10.5	7.1	4.8
Total 71 countries	148.8	3.7	306.9	3.0

year, at 6.5 mt and 3.1 mt, respectively. The steel output in Brazil saw a steep rise going up by 13.1 per cent at 2.8 mt.

Region-wise, Africa saw their output rise steeply by 8.1 per cent. While EU saw its numbers dip by 3.3 per cent,

Table 2. Top 10 steel-producing countries

	Feb 2024 (MT)	% change Feb 24/23	Jan-Feb 2024 (MT)	% change Jan-Feb 24/23
China	81.2	3.5	168.0	1.8
India	11.8	11.4	24.5	10.0
Japan	7.0	1.1	14.3	0.8
United States	6.5	-1.2	13.0	-2.6
Russia	5.7	-4.4	11.7	-3.3
South Korea	5.1	-1.5	10.8	-0.2
Türkiye	3.1	46.6	6.3	34.5
Germany	3.1	4.4	6.2	4.6
Brazil	2.8	13.1	5.5	6.4
Iran	2.2	14.3	4.8	26.5

e - estimate. Ranking of top 10 producing countries is based on year-to-date aggregate.

while Europe (Others)'s production saw its output go north by huge 32.5 per cent.

Asia and Oceania's steel production grew by 3.9 per cent. The Middle-East region's production went up by a 10.8 per



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cent while North America's output decreased by 1.3 per cent.

South America's steel production surged by 10.5 per cent compared with February 2023 figures. Russia and other CIS nations saw their figures go down by 2.5 per cent.

Decarbonization of steel industry requires regulation and price incentives

The decarbonization of the steel industry is key to achieving global targets for zero CO₂ emissions. Legal regulation combined with price incentives are the main factors that will drive investment in the industry and increase consumption of clean steel, says Reuters columnist Clyde Russell.

The steel industry accounts for about 8% of global carbon emissions and about 30% of industrial emissions. A decisive factor in the transition to green steel production is how much the costs will increase compared to current production methods, and whether it is possible to increase output quickly enough.

A premium for low-carbon products will show whether the market will agree to consume green steel, which will cost more than traditional steel. For example, according to participants in an industry conference held in Australia, the premium could range from \$0-150 per tonne.

Monash University has estimated that green steel that can be produced in Western Australia will cost about \$570/t, as the region has prospects for wind, solar, and hydrogen projects.

At the same time, even a small premium can make these products unviable for most of the market, where minimal costs are the main factor in consumption. For example, in China, the only sector that is potentially willing to pay even the highest premium for low-carbon steel is the automotive industry, as it will only slightly affect the retail price of an individual vehicle.

However, according to S&P Global, the Chinese automotive sector used 54 million tons of steel this year, which is only 6% of the country's total demand. The largest consumers of steel products in the country are the real estate and infrastructure sectors, which in 2024 already consumed 518 million tons of steel, or 57% of the total. This level of consumption will add significant amounts to the cost of green steel products if a premium is applied.

As for Australia, if it decides to process its iron ore into DRI, it would need to be further enriched to hot briquetted iron for more profitable and easier transportation. The country could supply these products to Asian steel mills (China, Japan, etc.). But to produce the final low-carbon

steel products, these countries must have access to green hydrogen or clean electricity. All of this requires significant investment, but China and other Asian countries are still building blast furnaces and oxygen furnaces.

Therefore, the only way to stimulate the global transition to green steel, the analyst notes, is probably through appropriate regulation, such as cross-border carbon taxes. However, reaching a global agreement on such a system will be a challenge, as Asian developing countries are likely to resist this step.

Decarbonization of the steel industry, according to Fastmarkets, will continue to be a leading topic in 2024. Sufficient supplies of clean hydrogen and renewable energy at competitive prices will be crucial.

India reduces trade deficit on the back of better exports of and stable imports of steel

India's steel trade deficit has come down to ₹10,411 crore (\$1,258 million) for the April–February period, down 10 per cent sequentially, on the back of improving exports, and stable imports during February, a report of the Steel Ministry.

Trade deficit was ₹11,564 crore in the April–January period of the fiscal.

Import of finished steel stood at 7.6 million tonnes (mt), and was valued at ₹63,432 crore (\$7,663 million) while exports were at 6.6 mt and valued at ₹53,021 crore (\$6,405 million). India was a net importer, with shipments coming-in exceeding outbound shipments by nearly 1 mt. Imports increased 29 per cent YoY and remained at January levels (with no significant increase) for February at 0.8 mt. Exports, on the other hand, increased by 78 per cent YoY and by 21 per cent sequentially in February to over 1 mt, the Ministry report said.

“Volume-wise hot rolled coil / strip – at 3.4 mt – was the most imported item accounting for 45 per cent share (with China being the largest seller), accounting for 2.5 mt of the shipments coming in,” the report mentioned.

Hot rolled coils and strips were the highest exported item accounting for 2.6 mt or nearly 39 per cent of the volumes. Flat product exports increased by 16 per cent YoY to 5.9 mt, while non-flat products saw a 7 per cent YoY decline to 0.7 mt.

According to the Ministry report, Italy, Spain and Belgium were the three top buyers; and Europe accounted for 45 per cent of the exports from India.

Shipments to Italy – the largest market – stood at 1.5 mt, up 85 per cent YoY. Exports in the year-ago-period were



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0.8 mt and valued at \$1,228 million, up 43 per cent, YoY. Exports to Belgium increased 37 per cent YoY to 0.8 mt or \$646 million, up 6 per cent. Shipments made past year was 0.53 mt, the report mentioned. The other big buyer, Spain, saw an over 100 per cent increase in exports to 0.63 mt for April–February period, which was at 0.3 mt in the same period last fiscal. Exports were valued at \$527 million, up 65 per cent YoY. Other European buyers were France, Germany and Greece, and shipments stood at around 29,000 tonnes, 31,300 tonnes and 42,400 tonnes, respectively, the report showed. Other major buyers were Nepal and UAE, where exports stood at 0.6 mt, up 14 per cent (\$340 million) and 0.5 mt, down 28 per cent (\$442 million), respectively.

Steel demand in China disappoints

The pick-up in Chinese steel demand remains slower than expected this year, continuing to weigh on steel profit margins and iron ore prices. Steel inventories at major Chinese steel mills rose 3% year-on-year to 19.5mt in mid-March and remained almost flat compared to levels seen in early March, according to data from the China Iron and Steel Association (CISA). Inventories are increasing as the pick-up in steel consumption from end-users is weaker than expected at this time of the year. Meanwhile, crude steel production at major mills fell marginally by 0.5% from mid-March and 9% YoY to 2.05mt/d in late March, as some steelmakers had begun maintenance stoppages on their blast furnaces in response to margin losses. The most active contract of iron ore trading at SGX fell for a second consecutive day this morning with prices falling below \$103/t amid weak demand from the Chinese steel industry primarily due to the prolonged property sector crisis.

Naveen Jindal elected as the president of the Indian Steel Association (ISA)



Naveen Jindal, chairman, Jindal Steel and Power has been elected as the president of Indian Steel Association (ISA), the apex body for steel producers. He succeeds Dilip Oommen, CEO of ArcelorMittal Nippon Steel India.

Jindal said that for India to realise its development goals, steel along with its upstream and downstream manufacturing value chains have to

grow in tandem. He also said that decarbonisation was a huge challenge which is a key initiative for saving the planet.

“The steel Industry has taken the onus and is committed to decarbonise and reduce its carbon footprints to meet its target in-line with commitments of the Prime Minister of India to the world,” Jindal added.

Oryx says its recycling activities improving Thailand's environment

Netherlands-based metals recycling company Oryx Stainless, which also has operations in Thailand, says a study it commissioned shows that increased recycling of stainless steel “can make a noticeable contribution to mitigate climate change in Thailand and globally.”

The study was conducted by Thai and German scientists on behalf of Oryx Stainless (Thailand) Co. Ltd., along with The Fraunhofer Center for International Management and Knowledge Economy IMW from Leipzig, Germany. The effort also was supported by the German Embassy in Thailand, according to Oryx.

Oryx says the study examined the social welfare benefits of recycling stainless steel in Thailand. “For every ton of stainless steel scrap used to produce new stainless steel, 6.71 tons of CO₂ are saved compared to the use of primary raw materials,” says Oryx.

Based on the stainless steel scrap handled by Oryx Stainless in Thailand in 2021 (used as the reference year in the study), the scientists calculated CO₂ savings of 556,000 tons. This approximately corresponds to the annual carbon footprint of the residents of the Muang Chachoengsao district near an Oryx Stainless plant in Thailand.

That emissions tonnage figure also equates to 1.45 percent of the total greenhouse gas (GHG) emissions from all industrial processes Thailand in 2021, according to the researchers.

“The potential for Thailand and the climate becomes clear when one sees that almost 3.6 million tons of CO₂ were saved within the entire Oryx Stainless Group in the reference year,” states the recycling company.



This study shows that the smart use of recycling raw materials such as stainless steel scrap and their use in the production of new products can make a tangible contribution to the fight against climate change," says Sirichai Tempoomsuk, the chief financial officer (CFO) of Oryx Stainless Thailand.

"Stainless steel scrap is a particularly valuable secondary raw material due to its very high recyclability," continues the CFO. "Stainless steel can be recycled without any loss of quality. Worldwide, 95 percent of stainless steel is recycled at the end of its lifespan [and] 70 percent is recycled as stainless steel."

Adds Tempoomsuk, "Scrap currently accounts for around 48 percent of raw materials for stainless steel production worldwide. In Europe, leading stainless steel producers go to the limits of what is technically feasible and use up to 95 percent secondary raw material blends for the production of new stainless steel."

Oryx says the effects of climate change are of particular importance to Thailand, with the country ranking ninth in a global long-term climate change risk index calculated by Germany-based think tank Germanwatch.

In terms of the economic savings of recycling, the volume of stainless steel scrap Oryx puts back into the production cycle in Thailand prevented about \$52 million of spending on ores and mining, according to the study.

The calculation is based on the "Scrap Bonus" indicator developed by the Fraunhofer Center, which involves two steps. In the first step, the environmental impact avoided by using one ton of stainless steel scrap in steel production is quantified. In the second step, various economic estimates and price references from emissions trading systems are used to convert the avoided environmental impact into a currency value. "In other words, a price is assigned to the (avoided) pollution," says Oryx.

Oryx says 7.79 million tons of stainless steel was

produced in Asia in 2023 (excluding China and South Korea), with Association of Southeast Asian Nations (ASEAN) countries including Malaysia and Indonesia "building up millions of tons of new capacity."

Thailand produced around 366,000 tons of stainless steel in 2022 and is the second largest consumer of stainless steel in the ASEAN region, says the recycling firm.

"The growth perspective in Southeast Asia and thus in Thailand underlines the need for the smart use of our resources in view of the ongoing climate change caused by the emission of greenhouse gases," says Christian Klöppelt, a research fellow at the Fraunhofer Center.

He adds, "This is where politics is needed, also in Thailand. Smart recycling creates both economic and environmental benefits for Thai society. To take full advantage of these benefits, policy makers should ensure a level playing field for raw materials and provide favorable operating conditions for the recycling industry."

The researchers propose a system of pricing tied to CO₂ emissions in Thailand. "Additionally, there's a suggestion to expand the Thai Bio-Circular-Green (BCG) Economy Model to include metal scrap," add the scientists. They also recommend "creating conducive operating conditions for the recycling industry."

Welspun Corp arm to invest Rs 2,355-cr in multiple states

Welspun Corp wholly owned subsidiary, Sintex-BAPL has finalised an investment of upto Rs 2,355 crore to set up manufacturing units in the states of Telangana, Odisha, Madhya Pradesh and Jammu & Kashmir.

SintexBAPL has finalized investment to set up manufacturing units in multiple states through its wholly owned step-down subsidiary, Sintex Advance Plastics (SAPL).

The investment will be spread over the next two financial years starting from FY25 to FY26 and the projects will be funded through a combination of debt and equity, said the company.

The proposed investment is for manufacturing plastic pipes and water storage with a total capacity of around 200,000 MT and will cater to the exponentially growing water storage and distribution segment.

The company stated that this is in sync with our stated plan at the time of acquisition of Sintex BAPL itself to leverage the brand and enter into different types of plastic pipes segment. The market size of plastic pipes used for buildings and infrastructure in India is likely to reach to around Rs 65,000 crore in 2030.

Welspun Group chairman, B. K. Goenka said, Over the past



50 years, Sintex has been at the forefront in providing water solutions. Along with improving existing business, foray into new product segments in new locations will further strengthen Sintex brand equity and our B2C market strategy. Recent signing of framework agreement with Rollepaal Pipe Extrusion Technology B.V. ensures our commitment towards superior technology.

Welspun Corp is primarily engaged in business of manufacture and distribution of steel and steel products. The company's consolidated net profit stood at Rs 291.86 crore in Q3 FY24, steeply higher from Rs 23.24 crore posted in Q3 FY23. While net sales stood at Rs 4,749.71 crore, up 97.7% year on year in Q3 FY24.

China's demand for flat steel products to increase in 2024

China's manufacturing sector is overtaking its construction sector in driving the country's demand for steel, in a shift that is expected to benefit flat steel products more than long steel ones, an industry expert said at an industry conference on Friday March 22 reported by Fastmarkets.

The demand for flat steel products is expected to increase in 2024, due to growth in the energy sector on the back of China's decarbonization efforts and the country's leading position in the shipbuilding sector, China Minmetals Economic Research Institute's chief researcher Zuo Geng said.

Zuo was speaking at the 13th China Steel Logistics Summit Forum held by the China Federation of Logistics & Purchasing's Steel Logistics Professional Committee and trading service platform Zall Steel in Shanghai on Friday.

Steel consumption in the energy, shipbuilding and transportation sectors is projected to rise by between 3.9% and 16% in 2024, Zuo said.

But demand for long steel products is set to remain subdued, given the poor demand outlook from the construction sector, Zuo added.

The weak demand is due to a downturn in China's property sector and a softer push for infrastructure construction amid overhanging debt woes in the country, sources said.

Steel consumption in China's construction sector is expected to shrink to 486 million tonnes in 2024, down by 4% from 506 million tonnes in 2023, Zuo said.

Steel demand mixed across sectors

Growth performance was mixed among downstream users in China's steel industry in 2023, with the property sector – which is the major consumer of construction steel including long products such as rebar – still

struggling with a multi-year downturn amid a debt crisis. Most of the performance indicators for China's real estate market are negative, with investment in real estate development falling by 9.6% year on year in 2023 and dipping by 9% year on year in the first two months of 2024, according to data from the National Bureau of Statistics (NBS).

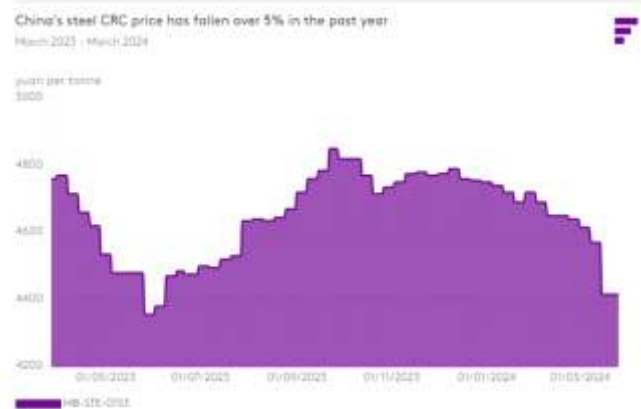
Meanwhile, there has been an increase in investments in the manufacturing sector in 2023, in areas like special-purpose machinery, automobiles and electrical machinery, which will in turn raise the demand for steel, Zuo said.

There is also a strong overseas demand for steel, evident from the increase in China's exports of indirect steel like steel containing goods from sectors such as precision engineering, machinery and transportation, which could give Chinese steelmakers and traders insight into what kind of products are in demand, Zuo added.

China's plans to upgrade equipment a boon

Beijing's latest pledge to promote a fresh round of large-scale equipment upgrades and trade-in of consumer goods is also a boon for steel demand, with the move expected to benefit flat steel products such as cold-rolled steel, galvanized steel which are used in a wide variety of applications like automobiles and home appliances, Zuo said.

An action plan released by the State Council in March said China aims to increase its investment in equipment for industry, agriculture, construction, transportation,



education, culture, tourism and medical care by at least 25% by 2027.

Fastmarkets' weekly price assessment for steel CRC, domestic, ex-whs Eastern China, averaged 4,648 yuan (\$657) per tonne in 2023, down by 260 yuan per tonne, or 5.3%, from 4,908 yuan per tonne a year earlier.

The annual average of Fastmarkets' weekly price assessment for steel hot-dipped galvanized coil, domestic, ex-whs Eastern China, which considers 80gsm



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zinc-coated zero-spangle HDG, came in at 4,984 yuan per tonne in 2023, down by 329 yuan per tonne, or 6.2%, from 5,313 yuan per tonne in 2022.

Prices for hot-rolled coil – the substrate for CRC and HDG – also logged significant losses in 2023, with the annual average for Fastmarkets' price assessment for steel hot-rolled coil domestic, ex-whs Eastern China (Shanghai) standing at 4,009 yuan per tonne in 2023, down by 405 yuan per tonne, or 9.2%, from 4,414 yuan per tonne in 2022.

The shift toward cleaner raw materials

While China's demand for steelmaking raw materials will remain high with the country accounting for more than half of global steel capacity, China's transition to greener equipment will require cleaner raw materials such as iron ore of a higher grade, direct reduction iron (DRI), pellets, and scrap of higher quality, Zuo said.

The spread between high-quality iron ore and cargoes of lower quality is expected to gradually widen, which will create a lot of arbitrage opportunities, Zuo added.

The spread between Fastmarkets' index for iron ore 65% Fe Brazil-origin fines and mid-grade 62% Fe fines on cfr Qingdao basis averaged \$12.40 per tonne in February, up by \$0.72 per tonne from \$11.68 per tonne in January.

U.S. DRI Projects Receive Federal Support

3/25/2024 - Cleveland-Cliffs Inc., SSAB and Vale will share up to US\$1.4 billion in federal funding supporting several proposed decarbonization projects. The funding, announced Monday, was awarded through the U.S. Department of Energy (DOE) and is meant to help spur decarbonization of energy-intensive industries, reduce industrial greenhouse gas emissions, support good-paying union jobs, revitalize industrial communities, and strengthen the nation's manufacturing competitiveness. "Spurring on the next generation of decarbonization technologies in key industries like steel, paper, concrete, and glass will keep America the most competitive nation on Earth," said U.S. Energy Secretary Jennifer M. Granholm.

"Thanks to President Biden's industrial strategy, DOE is making the largest investment in industrial decarbonization in the history of the United States. These investments will slash emissions from these difficult-to-decarbonize sectors and ensure American businesses and American workers remain at the forefront of the global economy."

SSAB has been awarded up to US\$500 million for a fully hydrogen-fueled direct reduction facility in Mississippi. The company also would expand its Montpelier, Iowa, steelmaking facility to utilize the resulting hydrogen-

reduced direct reduced iron (DRI).

"By demonstrating the use of clean hydrogen to produce DRI, SSAB estimates that this project would reduce emissions from the DRI manufacturing process by 81%, providing a pathway for deep decarbonization of U.S. iron and steel production," the department said.

Meanwhile, Cleveland-Cliffs is being awarded more than US\$500 million for two projects, one of which involves the installation of a hydrogen-ready flex-fuel DRI plant and two electric melting furnaces its Middletown Works in Ohio. The project would replace one of its seven operating blast furnaces.

"This project would enable Cleveland-Cliffs, the largest supplier of steel to the U.S. automotive industry, to further decarbonize the highest quality grades of rolled steel products for its customers, helping to decarbonize the automotive industry's supply chain," the department said. The company also plans to electrify slab reheating of high-silicon, grain-oriented electrical steel by installing an induction heater at its Butler, Pa., works.

"Induction heating is a highly energy-efficient heating method that minimizes energy losses and enables precise control over temperatures. This project anchors a crucial component of the U.S.'s energy supply chain and is widely replicable among the many iron and steel facilities that use reheat furnaces across the U.S.," the Energy Department said.

For its part, iron ore producer Vale plans to invest in an award of up to US\$282.9 million in a first-of-its-kind production facility for the cold agglomeration of iron ore pellets. The plant would be built somewhere in the U.S. Gulf Coast region.

"This transformative technology achieves deep emissions reductions by decarbonizing iron ore processing and reducing the need for industrial heat, resulting in a flexible product that can be used at both direct reduced and blast furnace ironmaking routes," the department said.

Jindal Steel Inaugurates New Hot Strip Mill

The equipment supplier has announced that Jindal Steel Odisha Ltd. has rolled the first coil on its new SMS group-built hot-strip mill. According to SMS group, the 1,780 mm high-capacity mill was built and commissioned in record time. SMS group supplied the primary descaler, a roughing stand in 2-high design and a second roughing stand in 4-high design, both with attached edgers, a transfer bar cooling system, a mandrel-less coilbox, edge heating equipment, drum shear, secondary descaler, a seven-stand finishing mill, laminar cooling and three down coilers.

SMS's integrated business unit AMOVA supplied a coil conveying system, coil strapping machines, marking



machines and an inspection line. The mill can convert 12 m long slabs in thicknesses ranging from 180 mm to 260 mm and in widths ranging from 800 mm to 1,680 mm. Its finished product thickness ranges from 1.2 mm to 20 mm. It can produce 5 million metric tons annually.

"The range of steel grades that can be processed is very wide," SMS group said. "These include sophisticated grades such as HSLA, pipe grades and silicon steels. The share of harder material grades is more than 20%. Furthermore, very thin strips can be rolled reliably and stably," it added.

Primetals Technologies Contracted for Cold Mill Upgrade

SSAB has issued the final acceptance certificate on an improvement to its 4-stand tandem cold mill in Hämeenlinna, Finland, and is ready to begin the final phases of the project, according to project contractor Primetals Technologies. According to Primetals Technologies, the third to fifth phases of the project will involve upgrades to transformers, drives and motors. In Phase 5, an obsolete motor will be refurbished, allowing it to be used as a replacement for the other already modernized motors.

"The objective of the extensive upgrade is to secure the supply of spare parts for the mill stand drives well into the future. Moreover, the availability of the tandem cold rolling mill will be increased," the company said.

ANDRITZ Lands Order for Processing Line Upgrade

ANDRITZ has been contracted to upgrade a 32-year-old push pickling line at Salzgitter Flachstahl, the company has announced. According to ANDRITZ, it will supply a new pickling section for the line, which processes heavy-duty steel grades. ANDRITZ said the upgrade will allow for continued reliable operation and increase the line's efficiency.

The scope of supply includes a circulation system, high-turbulence hydrochloric acid pickling, a compact rinsing and drying section, and a trimming shear.

"The new process equipment will improve strip threading through the pickling section and increase pickling efficiency. The circulation system will be equipped with the latest ANDRITZ process control, ensuring optimized consumption of utilities and reduced emissions," ANDRITZ said.





Domestic passenger vehicle sales rise by 11% in February – SIAM

As per the recent month data published by Society of Indian Automobile Manufacturers (SIAM) reported sharp increase in Passenger vehicle sales by 11 percent year-on-year jump in dispatches to dealers in February, as sports utility vehicles (SUVs) continued to drive demand. It was the highest-ever February dispatch by car manufacturers. Total dispatches of passenger vehicles (PVs) to dealerships stood at 370,786 units in February, 10.8 per cent higher than 334,790 units sent in February last year, data from the Society of Indian Automobile Manufacturers (SIAM) revealed.

Three-wheeler sales in February were at 54,584 units, up 8.3 percent. Two-wheelers continued their growth path selling 15,20,761 units in February, which was a sharp 34.6 percent jump. But the sales of commercial vehicles (CVs) remained muted. It saw a 0.7% decline in the wholesale volumes in February.

Vinod Aggarwal, President, SIAM said, "Passenger vehicles, two-wheelers, and three-wheelers have posted growth in February 2024 compared to the previous year,

while commercial vehicles have witnessed a slight de-growth. Overall robust GDP growth of the country in Q3 of 2023-24 has helped the auto sector.

The Bharat Mobility Global Expo 2024 held in February 2024, graced by the Hon'ble Prime Minister, has also created a strong positive sentiment for the consumers and therefore the industry expects the growth momentum to continue."

SUVs, meanwhile, remained the major growth driver. Mahindra and Mahindra said on Monday that its SUV sales in the domestic market jumped 40 percent in February. PV exports have grown by 20.5 percent, while two-wheeler exports have grown by 39.5 percent.

Honda Motorcycle & Scooter India's (HMSI) scooter exports have more than doubled from 13,365 units in February 2023 to 28,008 units in February 2024. Hero MotoCorp's motorcycle exports have also nearly doubled to 22052 units this February from 11689 units last February.

Domestic Sales: Monthly

Category Segment/Subsegment	Domestic Sales (In Nos.)	
	February	
	2023	2024
Total Passenger Vehicles³	3,34,790	3,70,786
Three Wheelers		
Passenger Carrier	38,777	42,582
Goods Carrier	8,711	10,013
E-Rickshaw	2,615	1,509
E-Cart	279	480
Total Three Wheelers	50,382	54,584
Two Wheelers		
Scooter/ Scooterettee	3,91,054	5,15,340
Motorcycle/Step-Throughs	7,03,261	9,64,362
Mopeds	35,346	41,059
Total Two Wheelers	11,29,661	15,20,761
Quadricycle	107	36

³ BMW, Mercedes, JLR & Volvo Auto data are not available. Tata Motors Domestic Sales data included only in "Total PV", detailed break-up is not available. However, without Tata Motors, "Total PV" would be 2,91,928 for February 2023 and 3,19,519 for February 2024



SIAM						
Segment wise Comparative Production, Domestic Sales & Exports data for the month of February 2024						
(Number of Vehicles)						
Category Segment/Subsegment	Production		Domestic Sales		Exports	
	February		February		February	
	2023	2024	2023	2024	2023	2024
Passenger Vehicles (PVs)*						
Passenger Cars	1,69,826	1,51,538	1,42,201	1,15,937	25,207	31,440
Utility Vehicles (UVs)	1,58,602	2,21,965	1,38,238	1,91,435	19,512	21,819
Vans	11,550	13,248	11,489	12,147	140	784
Total Passenger Vehicles (PVs)	3,37,978	3,86,741	2,91,928	3,19,519	44,859	54,043
Three Wheelers						
Passenger Carrier	56,978	65,687	38,777	42,582	19,386	25,203
Goods Carrier	8,191	10,797	8,711	10,013	254	638
E-Rickshaw	2,516	754	2,615	1,509	-	-
E-Cart	407	567	279	480	-	-
Total Three Wheelers	68,092	77,805	50,382	54,584	19,640	25,841
Two Wheelers						
Scooter/ Scooterette	4,40,901	5,67,463	3,91,054	5,15,340	33,378	47,364
Motorcycle/Step-Throughs	8,72,062	12,19,447	7,03,261	9,64,362	2,01,097	2,80,142
Mopeds	35,706	42,624	35,346	41,059	612	576
Total Two Wheelers	13,48,669	18,29,534	11,29,661	15,20,761	2,35,087	3,28,082
Quadricycle	452	331	107	36	348	458
Grand Total	17,56,191	22,94,411	14,72,078	18,94,900	2,99,934	4,08,422

* BMW, Mercedes, JLR, Tata Motors and Volvo Auto data is not available
Society of Indian Automobile Manufacturers (12/03/2024)

SIAM						
Summary Report: Cumulative Production, Domestic Sales & Exports data for the period of April-February 2024						
Report I (Number of Vehicles)						
Category Segment/Subsegment	Production		Domestic Sales		Exports	
	April-February		April-February		April-February	
	2022-23	2023-24	2022-23	2023-24	2022-23	2023-24
Passenger Vehicles (PVs)*						
Passenger Cars	19,72,794	17,88,659	15,79,029	13,98,836	3,72,497	3,91,631
Utility Vehicles (UVs)	19,82,297	24,42,849	17,57,158	22,11,831	2,18,478	2,10,638
Vans	1,28,805	1,32,929	1,25,593	1,33,538	457	7,236
Total Passenger Vehicles (PVs)	40,81,696	43,64,437	34,61,780	37,42,205	5,91,432	6,09,505
Three Wheelers						
Passenger Carrier	6,61,579	7,74,583	3,20,963	5,02,125	3,41,819	2,72,257
Goods Carrier	89,553	1,04,148	86,679	99,864	4,396	3,439
E-Rickshaw	24,641	28,737	23,936	29,595	-	-
E-Cart	3,055	3,407	2,830	3,442	-	-
Total Three Wheelers	7,78,828	9,10,875	4,34,408	6,35,026	3,46,215	2,75,696
Two Wheelers						
Scooter/ Scooterette	51,13,161	58,42,185	47,53,085	53,72,713	3,74,014	4,68,460
Motorcycle/Step-Throughs	1,23,79,726	1,33,19,166	94,14,380	1,06,73,137	30,29,006	26,60,607
Mopeds	3,99,946	4,44,480	4,04,753	4,40,936	3,528	2,232
Total Two Wheelers	1,78,92,833	1,96,05,831	1,45,72,218	1,64,86,786	34,06,548	31,31,299
Quadricycle	2,356	4,196	620	694	1,854	3,536
Grand Total	2,27,55,713	2,48,85,339	1,84,69,026	2,08,64,711	43,46,049	40,20,036

* BMW, Mercedes, JLR, Volvo Auto data is not available and Tata Motors data is available for April-December only
Society of Indian Automobile Manufacturers (12/03/2024)



SIAI												
Category & Company wise Summary Report for the month of February 2024 and Cumulative for April-February 2024												
											Report II	
											(Number of Vehicles)	
Category	Production				Domestic Sales				Exports			
	February	2024	April-February	2023-24	February	2024	April-February	2023-24	February	2024	April-February	2023-24
Segment/Subsegment	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24
Manufacturer												
Passenger Vehicles (PVs)												
FCA India Automobiles Pvt. Ltd	1,000	370	15,387	8,066	917	331	11,705	4,081	030	160	4,612	4,010
Force Motors Ltd	42	142	693	1,170	60	98	577	1,582	1	-	5	3
Honda Cars India Ltd	9,535	15,990	1,06,687	1,15,566	5,025	7,142	87,726	79,513	969	5,836	19,527	30,729
Hyundai Motor India Ltd	55,401	67,599	5,47,478	7,16,203	47,597	50,201	5,16,945	5,61,720	10,890	10,300	1,42,179	1,50,555
Isuzu Motors India Pvt. Ltd	66	47	1,971	306	65	23	857	483	-	-	355	6
Kia Motors India Pvt. Ltd	30,389	22,723	3,29,395	2,75,944	24,650	20,200	2,47,728	2,24,234	7,408	7,308	79,554	50,403
Mahindra & Mahindra Ltd	30,876	44,100	3,30,225	4,37,636	30,358	42,401	3,20,266	4,19,246	1,400	590	9,659	10,586
Maruti Suzuki India Ltd	1,56,430	1,74,543	17,27,001	17,05,810	1,47,497	1,60,271	14,74,107	16,07,103	18,056	25,670	2,26,170	2,55,150
MG Motor India Pvt. Ltd	4,327	4,572	49,857	43,072	4,193	3,050	42,615	40,623	-	-	2	-
Nissan Motor India Pvt. Ltd	7,253	6,052	87,375	66,420	2,184	2,755	30,351	27,445	3,882	3,163	53,373	30,031
PCA Motors Pvt. Ltd	343	700	7,128	8,040	328	421	7,047	7,361	-	253	-	2,588
Renault India Pvt. Ltd	10,102	1,898	1,11,170	15,935	3,615	4,080	73,537	71,214	1,537	89	29,477	10,429
Skoda Auto India Pvt. Ltd	4,225	2,915	51,561	42,552	3,415	2,254	47,837	41,718	118	-	405	1,402
Tata Motors Ltd	NA	NA	4,05,173	4,17,241	NA	NA	4,08,087	4,24,350	NA	NA	1,765	1,998
Toyota Kirloskar Motor Pvt. Ltd	22,485	33,698	1,43,323	3,20,688	15,323	23,293	1,54,798	2,20,304	347	7,520	555	15,322
Volkswagen India Pvt. Ltd	5,334	7,430	67,377	87,241	3,311	3,019	37,446	39,866	755	1,629	23,506	39,576
Total Passenger Vehicles (PVs)	3,37,978	3,86,741	40,81,696	43,64,437	2,91,928	3,19,519	34,61,780	37,42,205	44,889	54,043	5,91,432	6,09,505

SIAI												
Category & Company wise Summary Report for the month of February 2024 and Cumulative for April-February 2024												
											Report II	
											(Number of Vehicles)	
Category	Production				Domestic Sales				Exports			
	February	2024	April-February	2023-24	February	2024	April-February	2023-24	February	2024	April-February	2023-24
Segment/Subsegment	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24
Manufacturer												
Three Wheelers												
Atul Auto Ltd	1,810	2,253	22,392	23,717	1,537	2,120	19,566	20,912	185	180	2,597	1,589
Bajaj Auto Ltd	42,749	50,547	4,15,555	5,38,043	37,849	36,331	2,65,379	4,28,055	1,509	15,155	1,72,700	1,40,706
Continental Engines Pvt. Ltd	202	451	5,042	5,907	297	367	5,743	5,711	-	-	-	-
Force Motors Ltd	350	200	2,802	3,743	-	-	-	-	196	14	2,600	3,040
Mahindra & Mahindra Ltd	5,196	5,226	53,793	72,106	5,350	6,158	52,823	72,310	-	60	453	453
Flagglo Vehicles Pvt. Ltd	8,137	8,818	89,465	1,02,914	8,606	7,552	75,225	91,335	(97)	1,864	23,514	11,577
TVS Motor Company Ltd	5,568	10,000	7,59,475	1,34,385	7,343	2,088	7,4740	18,703	7,781	8,548	1,44,781	1,17,321
Total Three Wheelers	68,092	77,805	7,78,828	9,10,875	50,382	54,584	4,34,408	6,35,026	19,640	25,841	3,46,215	2,75,696
Two Wheelers												
Ather Energy Pvt. Ltd	12,092	10,658	81,356	96,655	12,114	11,094	80,658	96,073	-	80	-	276
Bajaj Auto Ltd	2,54,310	2,89,192	32,05,912	33,95,589	1,15,039	1,68,727	1,15,49,165	20,67,314	1,75,027	1,24,167	15,42,241	1,84,457
Chetak Technology Ltd	500	2,500	5,335	11,730	2,256	1,800	4,437	10,287	-	-	-	-
Horo Moto Corp Ltd	3,68,053	4,41,095	47,68,044	50,06,032	3,82,317	4,45,005	46,53,093	49,06,113	2,143	20,149	1,56,740	1,69,758
Horus Motorcycle & Scooter India Pvt. Ltd	2,25,403	4,01,302	43,87,426	45,11,550	2,27,024	4,13,907	38,27,985	41,72,045	20,111	44,744	3,10,891	3,35,031
India Kawasaki Motors Pvt. Ltd	516	247	3,878	2,615	375	458	3,647	7,090	-	-	-	-
India Yamaha Motor Pvt. Ltd	56,606	79,045	7,79,833	8,49,384	39,397	56,538	5,24,973	6,38,328	5,694	21,873	2,51,428	1,99,207
Mahindra Two Wheelers Ltd	-	-	72	808	-	-	96	-	-	-	78	-
Okinawa Autotech Pvt. Ltd	6,166	1,364	52,030	10,739	6,728	1,244	56,273	13,557	-	-	78	-
Piaggio Vehicles Pvt. Ltd	4,824	4,341	58,138	47,559	2,900	3,041	41,155	35,008	1,215	1,029	10,532	12,881
Royal-Enfield (U-1 of Eicher Motors)	63,190	78,313	7,58,195	8,50,784	64,436	67,922	6,71,656	7,68,791	7,105	8,013	87,704	63,430
Suzuki Motorcycle India Pvt. Ltd	86,054	1,00,821	8,56,178	10,24,747	52,455	83,304	6,57,687	8,32,845	8,170	14,151	1,83,700	1,95,389
Triumph Motorcycles India Pvt. Ltd	52	45	592	808	87	89	979	800	-	-	-	-
TVS Motor Company Ltd	2,09,741	3,31,760	37,95,244	37,10,660	2,27,472	2,67,502	23,57,156	28,06,610	45,624	90,300	8,48,239	6,03,860
Total Two Wheelers	13,48,669	18,29,534	1,78,82,833	1,96,05,831	11,28,661	15,20,761	1,45,72,218	1,64,86,786	2,35,087	3,28,082	34,06,548	31,31,288
Quadricycle												
Bajaj Auto Ltd	452	331	2,356	4,795	107	36	620	694	345	456	1,854	3,536
Total Quadricycle	452	331	2,356	4,795	107	36	620	694	345	456	1,854	3,536
Grand Total	17,55,191	22,94,411	2,27,55,713	2,49,85,339	14,72,078	18,94,900	1,84,69,026	2,09,64,711	2,99,934	4,09,422	43,46,049	40,20,036

SIAI												
Segment & Company wise Production, Domestic Sales & Exports Report for the month of February 2024 and Cumulative for April-February 2024												
											Report III	
											(Number of Vehicles)	
Category	Production				Domestic Sales				Exports			
	February	2024	April-February	2023-24	February	2024	April-February	2023-24	February	2024	April-February	2023-24
Segment/Subsegment	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24
Manufacturer												
Three Wheelers												
A: Passenger Carrier												
Atul Auto Ltd	476	702	4,840	8,771	415	628	7,381	8,566	184	172	2,279	1,893
Bajaj Auto Ltd	38,826	46,100	4,00,251	5,19,247	28,588	31,807	2,37,250	3,79,172	11,374	14,647	1,70,478	1,59,250
Continental Engines Pvt. Ltd	97	74	1,567	955	83	53	1,658	919	-	-	-	-
Force Motors Ltd	350	200	2,802	3,743	-	-	-	-	196	14	2,600	3,040
Mahindra & Mahindra Ltd	1,625	2,278	18,222	26,067	1,760	3,278	15,201	33,154	-	60	337	409
Flagglo Vehicles Pvt. Ltd	8,132	8,818	71,204	72,623	6,514	7,907	49,710	51,960	(92)	1,650	22,616	10,626
TVS Motor Company Ltd	9,475	9,832	1,57,708	1,33,176	1,308	2,027	14,348	18,354	7,724	8,430	1,43,440	1,16,439
Total A: Passenger Carrier	68,978	86,887	6,61,679	7,74,683	38,777	42,682	3,20,953	5,02,126	19,386	26,203	3,41,819	2,72,267
E-Rickshaw												
Atul Auto Ltd	167	254	2,861	4,393	241	375	2,925	4,793	-	-	-	-
Continental Engines Pvt. Ltd	99	251	1,323	4,172	90	189	1,342	4,010	-	-	-	-
Mahindra & Mahindra Ltd	2,250	259	20,437	19,732	2,284	945	19,689	20,792	-	-	-	-
Total E-Rickshaw	2,516	764	24,641	28,737	2,615	1,609	23,956	29,595	-	-	-	-
B: Goods Carrier												
Atul Auto Ltd	1,060	686	8,769	8,232	1,160	967	9,647	7,866	4	8	718	106
Bajaj Auto Ltd	3,023	4,741	35,904	48,798	3,900	4,530	34,523	46,083	192	209	1,922	1,456
Continental Engines Pvt. Ltd	97	137	2,826	704	123	58	2,648	589	-	-	-	-
Mahindra & Mahindra Ltd	1,020	1,244	12,012	14,933	1,141	1,722	13,204	14,812	-	-	76	44
Piaggio Vehicles Pvt. Ltd	2,005	2,921	28,781	30,291	2,282	2,857	27,715	28,375	1	304	1,788	951
TVS Motor Company Ltd	92	168	1,581	1,187	35	45	394	349	57	119	1,332	892
Total B: Goods Carrier	8,191	10,797	89,553	1,04,148	8,711	10,013	86,679	99,864	254	638	4,396	3,439
E-Card												
Atul Auto Ltd	107	301	1,102	1,822	121	250	1,045	1,697	-	-	-	-
Continental Engines Pvt. Ltd	-	14	31	271	1	17	38	193	-	-	-	-
Mahindra & Mahindra Ltd	300	247	1,022	1,374	167	213	7740	1,652	-	-	-	-
Total E-Card	407	567	3,055	3,407	279	480	2,863	3,442	-	-	-	-
Total Three Wheelers	68,092	77,805	7,78,828	9,10,875	50,382	54,584	4,34,408	6,35,026	19,640	25,841	3,46,215	2,75,696



Segment & Company wise Production, Domestic Sales & Exports Report for the month of February 2024 and Cumulative for April-February 2024												
											Report III	
											(Number of Vehicles)	
Category	Production				Domestic Sales				Exports			
	February		April-February		February		April-February		February		April-February	
Segment/Subsegment	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24
Manufacturer	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24
Passenger Vehicles (PVs)												
A: Passenger Cars												
Honda Cars India Ltd	9,243	7,705	1,30,807	75,643	6,026	3,556	79,785	49,140	854	2,328	18,270	23,854
Hyundai Motor India Ltd	30,385	29,850	3,43,639	3,35,361	24,793	16,811	2,42,439	2,09,208	5,822	8,756	88,611	1,25,294
Mahindra & Mahindra Ltd	-	-	-	-	-	-	214	-	-	-	-	-
Maruti Suzuki India Ltd	1,18,357	1,04,493	2,60,920	11,27,886	1,02,665	86,890	10,25,839	8,89,183	13,458	16,839	1,84,080	1,79,317
MG Motor India Pvt Ltd	-	NA	-	3,052	-	NA	-	-	-	1,914	-	-
Nissan Motor India Pvt Ltd	4,426	3,990	44,818	30,261	-	-	-	-	3,765	2,204	43,450	29,741
Renault India Pvt Ltd	2,693	960	20,116	10,768	1,758	828	18,215	9,240	543	79	8,850	3,791
Skoda Auto India Pvt Ltd	1,777	916	26,185	18,437	1,446	1,028	23,500	17,595	-	-	-	22
Tata Motors Ltd	NA	NA	1,35,192	1,41,704	NA	NA	1,35,177	1,41,371	NA	NA	150	1,384
Toyota Kirloskar Motor Pvt Ltd	76	249	874	2,217	4,290	4,791	37,292	50,980	-	-	-	-
Volkswagen India Pvt Ltd	2,910	4,392	32,957	48,582	1,983	1,831	16,574	19,247	755	1,136	17,408	25,438
Total A: Passenger Cars	1,69,826	1,51,538	19,72,794	17,88,659	1,42,201	1,16,337	16,79,029	13,96,836	26,207	31,440	3,72,497	3,91,631
B: Utility Vehicles (UVs)												
Force Motors Ltd	1,000	376	15,987	8,056	917	331	11,765	4,981	630	160	4,612	4,018
Force Motors Ltd	42	142	653	1,770	80	98	877	1,582	1	-	8	3
Honda Cars India Ltd	390	8,281	5,860	42,923	-	-	3,184	4,941	30,355	115	3,610	648
Hyundai Motor India Ltd	25,396	37,746	3,09,839	3,80,845	22,508	33,390	2,74,510	3,52,512	5,028	1,544	42,508	25,271
Isuzu Motors India Pvt Ltd	56	97	1,871	306	66	23	657	483	-	-	355	6
Kia Motors India Pvt Ltd	33,309	22,723	3,29,399	2,75,944	24,000	20,200	2,47,728	2,24,234	7,430	1,300	79,554	50,439
Mahindra & Mahindra Ltd	30,858	44,076	3,27,872	4,39,356	30,227	42,401	3,70,985	4,19,293	1,373	540	9,600	10,354
Maruti Suzuki India Ltd	25,551	55,872	3,47,123	5,29,528	33,550	61,234	3,29,075	5,83,890	3,363	10,867	41,712	68,927
MG Motor India Pvt Ltd	4,327	4,572	49,837	40,970	4,193	3,030	42,315	38,908	-	-	17	-
Nissan Motor India Pvt Ltd	2,828	3,002	43,057	36,219	2,184	2,755	30,351	27,445	117	850	9,888	6,890
PCA Motors Pvt Ltd	373	700	7,129	8,050	328	421	7,047	7,381	-	253	-	2,888
Renault India Pvt Ltd	7,439	3,918	92,054	33,169	4,858	3,252	55,322	31,974	994	10	20,591	6,638
Skoda Auto India Pvt Ltd	2,440	2,300	26,396	26,115	1,972	1,228	24,337	23,550	118	-	408	1,390
Tata Motors Ltd	NA	NA	2,70,261	2,75,447	NA	NA	2,68,570	2,73,974	NA	NA	1,536	515
Toyota Kirloskar Motor Pvt Ltd	22,419	33,449	1,42,449	3,18,469	11,033	18,502	1,17,508	1,73,544	347	1,920	585	15,322
Volkswagen India Pvt Ltd	2,416	3,098	29,970	32,652	1,718	1,388	20,812	20,421	-	550	6,500	11,140
Total B: Utility Vehicles (UVs)	1,56,602	2,21,955	19,82,297	24,42,849	1,38,238	1,91,435	17,87,158	22,11,831	19,512	21,819	2,18,478	2,16,638
C: Vans												
Mahindra & Mahindra Ltd	120	90	2,393	240	137	-	2,067	13	35	20	80	231
Maruti Suzuki India Ltd	11,430	13,218	1,20,538	1,32,593	11,352	12,147	1,19,195	1,25,210	1,05	764	318	6,956
Tata Motors Ltd	NA	NA	3,714	90	NA	NA	4,340	5,405	NA	NA	80	90
Total C: Vans	11,550	13,248	1,26,645	1,32,929	11,489	12,147	1,26,699	1,33,638	140	784	467	7,236
Total Passenger Vehicles (PVs)	3,37,978	3,86,741	40,81,696	43,64,437	2,91,828	3,19,519	34,61,780	37,42,205	44,859	54,043	5,91,432	6,09,905

Segment & Company wise Production, Domestic Sales & Exports Report for the month of February 2024 and Cumulative for April-February 2024												
											Report III	
											(Number of Vehicles)	
Category	Production				Domestic Sales				Exports			
	February		April-February		February		April-February		February		April-February	
Segment/Subsegment	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24
Manufacturer	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24	2023	2024	2022-23	2023-24
Two Wheelers												
A: Scooter/ Scooterette												
Ather Energy Pvt. Ltd	12,092	1,668	81,356	86,650	12,147	11,084	80,658	86,073	-	80	-	276
Bajaj Auto Ltd	2,027	4,206	29,904	1,07,127	382	10,820	23,359	1,03,783	-	-	5	74
Chetak Technology Ltd	500	2,600	5,325	11,130	2,296	1,800	10,261	15,267	-	-	-	-
Hercuro Corp Ltd	24,714	31,928	3,40,296	3,93,081	22,152	30,987	3,27,231	3,71,019	454	1,306	0,954	26,074
Honda Motorcycle & Scooter India Pvt. Ltd	1,93,984	2,55,316	23,78,400	25,56,355	1,59,127	2,24,783	22,63,120	25,51,567	13,385	28,008	1,73,864	2,15,313
India Yamaha Motor Pvt Ltd	10,380	23,600	1,92,628	2,82,216	8,186	20,774	1,09,418	2,53,714	1,212	3,932	28,735	34,081
Okinawa Autotech Pvt. Ltd	6,166	1,084	82,650	10,138	8,726	1,244	86,273	13,557	-	-	73	-
Piaggio Vehicles Pvt Ltd	4,824	3,018	59,130	47,050	2,900	3,036	41,146	35,002	1,210	1,292	10,032	12,455
Suzuki Motorcycle India Pvt Ltd	74,081	88,457	7,27,499	8,73,033	50,488	81,480	6,39,448	8,08,219	8,958	5,060	74,073	73,961
TVS Motor Company Ltd	1,12,148	1,38,011	12,06,954	14,48,578	96,952	1,22,142	11,32,940	13,20,542	8,173	7,906	72,168	1,06,226
Total A: Scooter/ Scooterette	4,40,901	5,67,463	51,13,161	58,42,185	3,91,054	5,15,340	47,53,085	53,72,713	33,378	47,364	3,74,014	4,68,460
B: Motorcycle/Step-Throughs												
Bajaj Auto Ltd	2,52,283	2,74,908	31,70,008	32,85,482	1,17,867	1,56,107	16,20,808	19,53,561	1,15,021	1,24,167	15,42,236	13,48,383
Hercuro Corp Ltd	3,44,139	4,09,187	44,27,748	46,86,151	3,60,166	4,14,763	43,25,772	45,90,594	11,689	22,062	1,47,486	1,43,684
Honda Motorcycle & Scooter India Pvt. Ltd	3,490	2,05,906	17,09,028	19,55,165	37,957	1,84,184	15,94,895	15,20,480	6,740	16,796	1,37,327	1,16,718
India Kawasaki Motors Pvt Ltd	516	247	3,848	2,615	375	458	3,641	4,090	-	-	-	-
India Yamaha Motor Pvt Ltd	46,220	55,440	5,87,205	5,57,198	31,211	35,704	3,55,556	3,82,911	14,482	17,941	2,32,088	1,05,129
Mahindra Two Wheelers Ltd	-	423	-	509	-	5	95	6	-	396	-	436
Piaggio Vehicles Pvt Ltd	-	-	-	-	-	-	-	-	-	-	-	-
Royal Enfield (Unit of Eicher Motors)	83,490	76,313	7,58,195	8,53,184	64,438	87,022	6,74,958	7,66,751	7,108	5,013	57,704	68,430
Suzuki Motorcycle India Pvt Ltd	1,19,973	1,43,868	1,28,679	1,51,714	1,908	1,841	18,238	25,626	8,212	9,071	1,09,022	1,21,226
Triumph Motorcycles India Pvt Ltd	52	45	596	608	87	69	979	980	-	-	-	-
TVS Motor Company Ltd	1,21,587	1,30,544	16,88,344	18,26,592	89,404	1,04,361	8,19,463	11,25,040	36,899	81,776	1,72,843	8,96,402
Total B: Motorcycle/Step-Throughs	8,72,062	12,19,447	1,23,76,726	1,33,19,166	7,03,261	9,64,362	94,14,380	1,06,73,137	2,01,097	2,80,142	30,28,006	26,60,607
C: Mopeds												
TVS Motor Company Ltd	35,706	42,624	3,90,946	4,44,480	35,340	41,059	4,04,753	4,40,930	612	570	9,528	2,232
Total C: Mopeds	35,706	42,624	3,99,946	4,44,480	35,340	41,059	4,04,753	4,40,930	612	570	9,528	2,232
Total Two Wheelers	13,48,669	18,28,534	1,78,92,833	1,96,05,831	11,29,661	15,20,761	1,45,72,218	1,64,86,786	2,35,087	3,28,082	34,06,548	31,31,299
Quadricycle												
Bajaj Auto Ltd	462	331	2,356	4,190	107	36	620	604	348	456	1,854	3,536
Total Quadricycle	462	331	2,356	4,190	107	36	620	604	348	456	1,854	3,536
Grand Total	17,65,191	22,94,411	2,27,55,713	2,48,85,338	14,72,978	18,94,800	1,84,69,026	2,08,64,711	2,99,934	4,08,422	43,46,049	40,20,036



Statistics

SLAM												
Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of February 2024 and Cumulative for April-February 2024												
												Report IV
												(Number of Vehicles)
Category Segment/Subsegment Manufacturer	Production				Domestic Sales				Exports			
	February 2023	2024	April-February 2022-23	2023-24	February 2023	2024	April-February 2022-23	2023-24	February 2023	2024	April-February 2022-23	2023-24
Passenger Vehicles (PVs)												
A : Passenger Cars - Up to 5 Seats												
Micro :Seats upto-4, Length Normally <3200 mm, Body Style-Hatchback, Engine Displacement Normally upto 0.8 Litre												
MG Motor India Pvt Ltd (Comie: EV)	-	NA	-	3,062	NA	-	-	1,914	-	-	-	-
Total Micro	-	-	-	3,062	-	-	-	1,914	-	-	-	-
Mini :Seats upto-5, Length Normally <3600 mm, Body Style-Hatchback, Engine Displacement Normally upto 1.0 Litre												
Maruti Suzuki India Ltd (Alto, Solero)	20,235	13,591	2,57,348	1,58,255	21,075	14,782	2,21,329	1,35,205	2,620	1,720	39,777	25,530
Force Motors India Pvt Ltd (Kwid)	2,553	380	25,110	10,755	1,758	228	18,215	5,240	543	70	8,850	3,701
Total Mini	22,961	14,671	2,96,964	1,67,054	23,633	15,610	2,39,544	1,39,505	3,163	1,799	48,657	33,329
Compact :Seats upto-5, Length Normally between 3600 - 4000 mm, Body Style-Sedan/Estae/Hatch/Notchback, Engine Displacement Normally upto 1.4 Litre												
Honda Cars India Ltd (Amaze, Jazz)	4,625	2,359	49,657	35,030	4,173	2,774	47,440	33,338	NA	36	932	644
Hyundai Motor India Ltd (Aura, Grand i10, i20, Sunni, Xcent)	28,739	24,486	2,89,891	2,58,487	24,248	15,737	3,28,422	1,90,095	3,579	5,701	81,974	74,837
Maruti Suzuki India Ltd (iEM Model# Baleno, Celerio, Dzire)	37,274	39,397	9,57,819	8,48,775	75,090	71,627	7,91,197	7,52,171	9,776	4,274	1,32,149	1,35,039
Tata Motors Ltd (Altroz, Tigor, Tigor)	NA	NA	1,35,192	1,41,704	NA	NA	35,177	1,47,071	NA	NA	50	387
Toyota Kirloskar Motor Pvt Ltd (Ciaz)	-	-	-	-	1,223	1,827	38,401	47,973	-	-	-	-
Volkswagen India Pvt Ltd (Vento)	-	-	874	-	-	-	753	-	-	-	1,035	NA
Total Compact	1,30,338	1,16,254	14,43,429	13,81,371	1,12,890	94,113	12,37,390	11,62,319	13,439	19,591	1,96,300	2,16,988
Super Compact :Seats upto-5, Length Normally between 4000 - 4250 mm, Body Style-Sedan/Estae/Hatch/Notchback, Engine Displacement Normally upto 1.6 Litre												
Maruti Suzuki India & Mahindra Ltd (Vitara)	-	-	-	-	-	-	-	-	214	-	-	-
Total Super Compact	-	-	-	-	-	-	-	-	214	-	-	-
Mid-Size :Seats upto-5, Length Normally between 4250 - 4500 mm, Body Style-Sedan/Estae/Hatch/Notchback, Engine Displacement Normally upto 1.6 Litre												
Honda Cars India Ltd (City)	4,520	5,040	57,150	40,673	1,963	1,784	32,345	15,819	770	2,290	17,556	22,810
Hyundai Motor India Ltd (Verna)	2,225	5,352	53,753	78,902	47	1,676	16,514	28,305	2,243	3,475	37,697	50,447
Maruti Suzuki India Ltd (Ciaz)	755	1,485	24,653	20,223	792	487	10,310	9,747	1,072	945	12,754	9,940
Nissan Motor India Pvt Ltd (Sunny)	4,425	3,050	44,312	30,201	-	-	-	-	3,755	2,204	43,450	29,747
Volkswagen India Pvt Ltd (Vento, Virtus)	2,915	4,532	37,483	18,589	1,063	1,637	15,621	9,277	755	1,136	16,373	22,377
Total Mid-Size	14,674	19,249	2,06,362	2,18,528	4,366	4,974	77,490	73,108	6,005	10,050	1,27,540	1,41,312
Executive :Seats upto-5, Length Normally between 4500 - 4700 mm, Body Style-Sedan/Estae/Notchback, Engine Displacement Normally upto 2 Litre												
Skoda Auto India Pvt Ltd (Coleo, Slavia)	1,707	815	24,516	16,437	1,356	1,028	22,085	17,734	-	-	-	22
Total Executive	1,707	815	24,516	16,437	1,356	1,028	22,085	17,734	-	-	-	22
Premium :Seats upto-5, Length Normally between 4700 - 5000 mm, Body Style-Sedan/Estates, Engine Displacement Normally upto 3 Litre												
Skoda Auto India Pvt Ltd (Succo)	0	0	1,848	0	90	-	1,456	131	-	-	-	-
Toyota Kirloskar Motor Pvt Ltd (Camry)	0	249	874	2,277	87	270	891	2,117	-	-	-	-
Total Premium	146	249	2,623	2,277	157	270	2,326	2,248	-	-	-	-
Luxury :Seats upto-5, Length Normally Over 5000 mm, Body Style-Sedan/Estates, Engine Displacement Normally upto 4 Litre												
Hyundai Motor India Ltd (iOrtho)	-	-	-	-	-	2	-	2	-	-	-	-
Total Luxury	-	-	-	-	-	2	-	2	-	-	-	-
Total Passenger Cars	1,69,828	1,51,538	19,72,794	17,88,659	1,42,201	1,15,937	15,79,029	13,98,638	25,207	31,440	3,72,497	3,91,631

SLAM												
Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of February 2024 and Cumulative for April-February 2024												
												Report IV
												(Number of Vehicles)
Category Segment/Subsegment Manufacturer	Production				Domestic Sales				Exports			
	February 2023	2024	April-February 2022-23	2023-24	February 2023	2024	April-February 2022-23	2023-24	February 2023	2024	April-February 2022-23	2023-24
B : Utility Vehicles (UVs)												
B : Utility Vehicles/ Sports Utility Vehicles; 4x2 or 4x4 offroad capability ; Generally ladder on frame ; 2 box ; 5 Seats or more but upto 10 Seats.												
UV1 : Length < 4000 mm & Price <20 Lakhs												
Force Motors India Ltd (WR-V)	390	-	5,850	-	-	-	4,341	-	115	-	640	288
Hyundai Motor India Ltd (Extor, Venue)	3,471	19,120	1,18,375	1,05,920	9,997	15,615	1,10,520	1,82,107	1,321	727	7,462	11,535
Kia Motors India Pvt Ltd (Sorento)	13,195	8,237	1,12,340	1,02,773	9,556	9,102	89,419	72,831	3,117	1,335	26,688	30,498
Mahindra & Mahindra Ltd (Savo, XUV300, XUV500, XUV700)	15,246	21,273	1,93,740	2,22,071	18,595	23,757	1,89,257	2,19,468	486	259	6,112	4,528
Maruti Suzuki India Ltd (iEM Model# Brezza, Fronx, Jimny)	15,574	34,967	1,80,507	3,31,060	15,767	35,253	1,29,436	2,94,173	75	5,649	30,136	37,154
Nissan Motor India Pvt Ltd (Magneite)	2,825	3,902	41,877	36,219	2,754	2,755	29,285	27,445	114	959	9,023	6,574
PCA Motors Pvt. Ltd (C3, EC3)	373	705	8,852	8,039	321	294	6,795	5,702	-	117	-	2,517
Renault India Pvt Ltd (Kiger, Triber)	7,139	3,918	82,051	32,189	7,558	3,262	69,522	37,871	997	10	20,981	8,558
Tata Motors Ltd (Nexo, Punch)	NA	NA	2,29,059	2,42,881	NA	NA	2,27,639	2,42,175	NA	NA	1,530	514
Toyota Kirloskar Motor Pvt Ltd (Urban Cruiser)	-	-	-	-	-	-	27,156	-	-	-	-	-
Total UV1	67,109	92,872	8,70,793	11,69,396	61,581	82,826	8,60,897	10,75,713	5,872	9,059	1,02,955	95,361
UV2 : Length 4000 to 4400 mm & Price <20 Lakhs												
Force Motors Ltd (Curkie)	42	1	657	15	50	-	677	-	1	-	6	2
Honda Cars India Ltd (Elevera)	-	8,281	-	42,923	-	3,184	-	30,365	-	3,670	-	6,509
Hyundai Motor India Ltd (Creta)	12,644	16,400	1,47,492	1,30,713	10,421	15,276	1,36,348	1,46,315	3,101	792	24,857	3,547
Kia Motors India Pvt Ltd (Seltos)	10,202	7,020	1,40,505	1,06,379	8,012	6,265	90,575	52,511	3,551	560	45,322	12,368
Maruti Suzuki India Ltd (iEM Model# Ertiga, Grand Vitara)	5,028	17,226	1,31,736	1,55,381	15,555	25,521	1,67,966	2,14,808	3,357	1,055	11,736	35,570
MG Motor India Pvt Ltd (Astor)	991	1,274	15,979	3,336	1,020	1,036	14,450	9,295	-	-	-	-
Nissan Motor India Pvt Ltd (Kicks)	-	-	1,246	-	-	-	1,355	-	3	-	65	15
PCA Motors Pvt. Ltd (C3, Aircross)	-	735	-	1,880	-	127	-	1,573	-	138	-	141
Skoda Auto India Pvt Ltd (Kushaq)	2,205	1,889	24,045	22,731	1,753	1,107	23,048	22,102	118	-	408	1,380
Toyota Kirloskar Motor Pvt Ltd (Mode - Manufactured for export)	14,160	21,002	65,845	1,81,026	3,307	6,331	19,365	48,236	37	1,520	510	15,320
Volkswagen India Pvt Ltd (Taigun)	2,270	2,919	25,700	30,720	1,655	1,286	19,779	15,897	-	550	6,500	11,140
Total UV2	51,162	76,333	5,57,947	7,10,204	41,913	61,183	4,73,276	6,14,100	10,478	11,136	89,102	86,920
UV3 : Length >4700 mm & Price <20 Lakhs												
Force Motors India Ltd (i-Landoo)	-	102	-	1,716	-	-	-	1,875	-	-	-	1
Isuzu Motors India Pvt Ltd (i-Landoo V-Cross)	65	-	1,925	58	83	-	607	365	-	-	355	8
Toyota Kirloskar Motor Pvt Ltd (Innova Crysta, Innova Hy-Cross)	4,937	8,370	47,573	29,110	4,771	8,421	47,490	55,280	-	-	-	-
Total UV3	5,002	8,480	49,500	90,882	4,234	8,572	48,106	90,320	-	-	355	7

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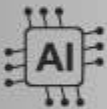
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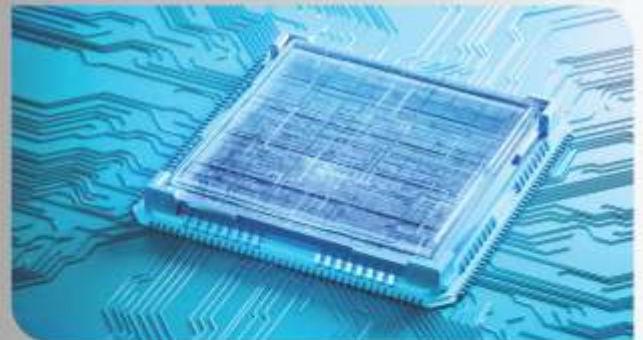
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