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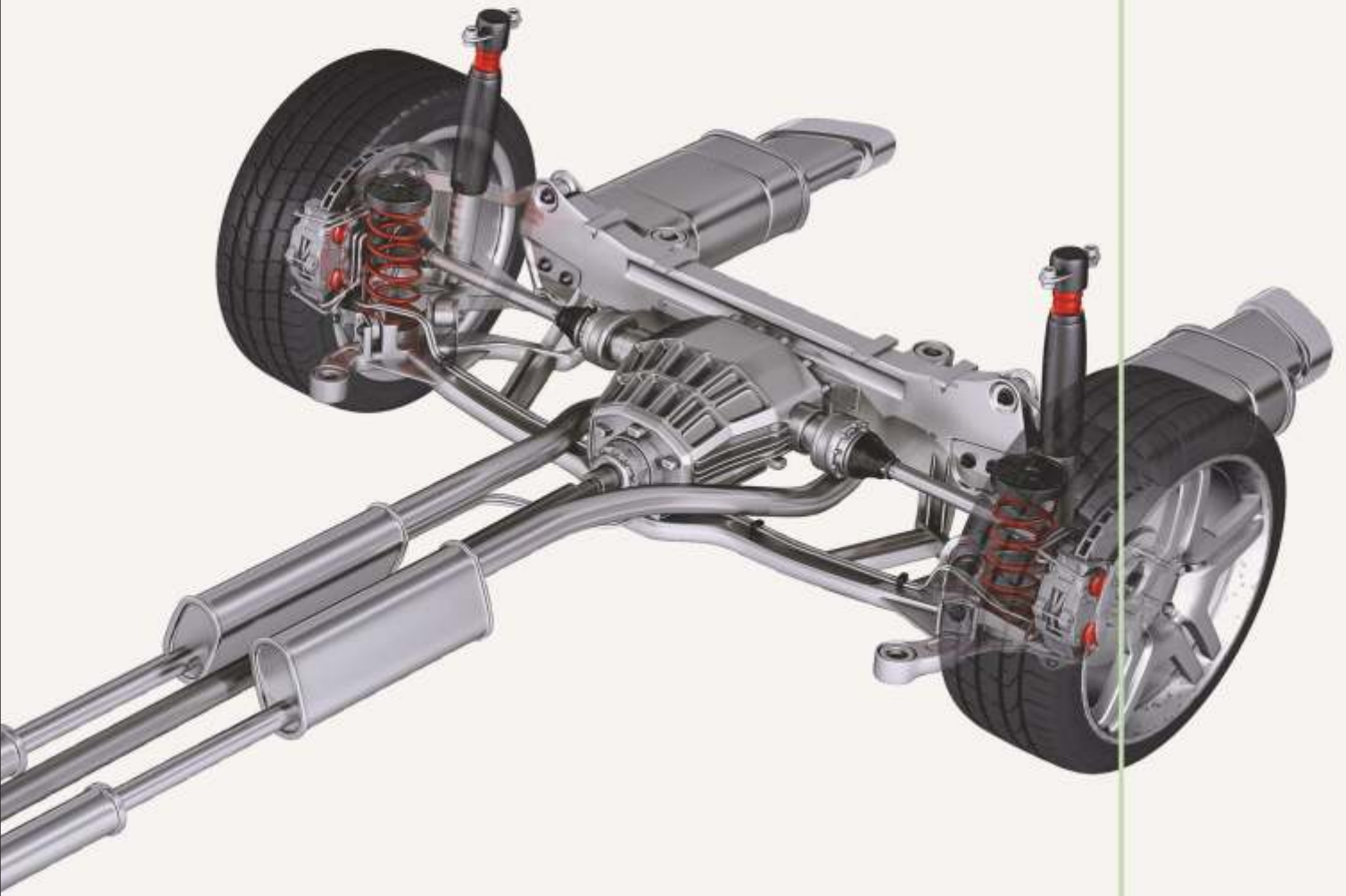
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DESIGN & LAYOUT

Ace Graphics

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Administrative Office

1, Alpha, M. G. Road, Vile Parle (E),
Mumbai - 400 057. India
Tel. : 91-22-2619 2376,
2617 1575 / 2617 1866

Email :

info@metalworld.co.in

Editorial : editorial@metalworld.co.in

Website : www.metalworld.co.in



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D. A. Chandekar Editor

Dear Readers,

The great Indian growth story revolves around infrastructure development and the metals are in the centre position of this process. One can not imagine infra development without metals. If growth story has to materialise fully, it will need a strong support from the metallurgical industry.

It is generally observed that the construction activity (and to some extent infrastructure projects also) tend to slow down in monsoon season. This is because of the flooding conditions in some areas as well as the road damages in some deteriorate the efficiency of logistics and slow down the work. This situation gets restored after the rains are over and by diwali time the market starts booming. This year also saw the same phenomenon and as expected the metals demand has started picking up. By the time we approach January, the year end pressure starts building. All the mills and their marketing executives want to complete their yearly targets and try very hard to push material out to the customers or atleast to the warehouse so that it gets added as 'sold' in their yearly tally. This game is being played with the same vigor year after year and finally achieves to provide a substantial forward push to the industry.

As on now, Indian economy looks robust with IMF and ADB projecting

Editorial Desk



more that 7 % GDP growth for the fiscal 2024-25. We are the fastest growing economy among the large ones and the government has set a target of reaching to the mark of 5 trillion in the next few years. The international situation at this point of time also seems to be favouring India. With the clouds of uncertainty roaming around over the Europe and the Middle East (due to Ukraine - Russia and Israel - Hamas war) India is one of the few growing economies of the world. Also, China's economy is seen de-growing and many companies are preferring to move their manufacturing base outside China. India can make the best use of this situation and consolidate its economy.

Remember, metals will always be part of this consolidation !

As most of you know, 'Asian Metallurgy' is a well established trade show in Asian metallurgical sector, ferrous as well as non ferrous. It comprises of a World Exposition and a series of panel discussions on the issues related to steel & metals industry across the Asian region. Since the covid pandemic the event has been successfully transitioned to digital platform and this year's edition, 12th Asian Metallurgy targets to reach 1 Million metallurgical executives across the globe. This is the power of Digitalization. The other benefits being it can be accessed from anywhere at 24X7 and is very cost effective. The events is scheduled during 18 - 23 December and one can get the full details on www.steelmetalexpo.com

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<https://metalworldddac.wordpress.com>

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Aluminium: The Metal of the Future

Aluminium is crucial for India's ambition of becoming a global manufacturing hub. It is imperative for hi-tech industries and sunrise sectors such as aerospace, defence, renewable energy, electric vehicles, etc.

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aluminium



Prasad Chavare - M.D. & CEO, FOSECO, India

“We are committed to a culture of constant innovation”

In the ever-evolving foundry and casting industry, Foseco India has not only withstood the test of time but has also emerged as a trailblazer. With a rich history spanning decades, Foseco India has firmly established itself through unwavering innovation and adaptability. The company's ability to remain at the forefront of the industry is not only a testament to its past but also a glimpse into the visionary approach it embraces. Foseco's innovative solutions and steadfast commitment to a "Solution Partnering Approach" have truly set it apart. In this interview with Prasad Chavare- Managing & CEO, we delve into how Foseco India seamlessly combines tradition and innovation, and we explore what the future holds for this industry leader.

1. Innovation is often closely tied to sustainability. How is Foseco India integrating eco-friendly practices and materials into the casting and foundry processes?

At Foseco India, our

unwavering commitment lies in the fusion of innovation and sustainability within our casting and foundry processes. To achieve this, we employ a multi-faceted approach that leverages cutting-edge solutions while prioritizing environmental preservation.

One notable example is INSTA Coatings, a revolutionary coating for foundries. This water-based powder coating for ferrous castings offers up to a 30% reduction in costs, eco-friendliness, and extended shelf life, saving valuable time and resources.

Another remarkable innovation is our Semco CC coatings. By providing precise control over drying times and temperatures, Semco CC coatings optimize oven drying processes. They also exhibit reversible color changes in high humidities, reducing waste and significantly lowering our environmental footprint.

Additionally, these coatings reduce our reliance on sand disposal and lower fettling costs, enhancing our operational efficiency. In summary, Semco CC coatings are a powerful and cost-effective solution for industries aiming to improve their processes, reduce energy expenditures, and embrace sustainability.



Figure 1 Semco CC

Our arsenal also includes Semco FDC coatings, specially designed for flow coating applications. These coatings bring a multitude of benefits to our operations. Their rapid drying speed accelerates production processes, leading to increased



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Face to Face

efficiency. Importantly, Semco FDC coatings reduce energy consumption by up to 50% during the drying process, resulting in substantial cost savings for businesses. Their user-friendly design streamlines application, making processes even smoother and more efficient.

We are committed to a culture of constant innovation and the pursuit of sustainable solutions that enhance operational efficiency and have a positive impact on the environment.

2. Could you share some recent examples of breakthrough technologies or solutions that Foseco India has developed to enhance the quality and efficiency of casting production?

Certainly, Foseco India stands at the forefront of developing breakthrough technologies and solutions aimed at

enhancing the quality and efficiency of casting production. Let's delve into two remarkable innovations:



Figure 2 ROTOCLENE

ROTOCLENE and STELEX Optiflow 3D.

ROTOCLENE is a cutting-edge process designed to produce the highest quality, clean steel for

casting. This method uses Rotary stirring equipment to generate a fine curtain of argon bubbles, effectively lifting fine inclusions from the metal. These bubbles efficiently capture any inclusions and bi-films, transporting them to the melt surface, where they become entrapped in the slag layer. Consequently, steel can be poured at lower temperatures, reducing shrinkage and promoting finer microstructures. The advantages of ROTOCLENE encompass achieving uniform melt temperature, enhancing metal purification, increasing filtration capacity, facilitating desulfurization, minimizing the risk of stopper freezing, lowering pouring temperatures, reducing defects in X-Ray and Magnetic Particle Inspection, and ultimately enhancing the mechanical properties of the cast steel.

Another groundbreaking innovation is the STELEX Optiflow 3D filters, representing a significant leap in casting filtration technology by harnessing

the power of 3D printing. This innovative approach allows for the creation of filters with highly specific pore sizes, mixed and graduated pores, and versatile structures within a single filter. The result is tailored filtration solutions that optimize inclusion capture and control metal flow to meet specific application requirements, ensuring consistent and predictable performance. This advanced design not only enhances filter performance but also offers high-capacity filters for large casting filtration. Furthermore, it simplifies filter application, leading to cleaner castings and improved casting process efficiency.

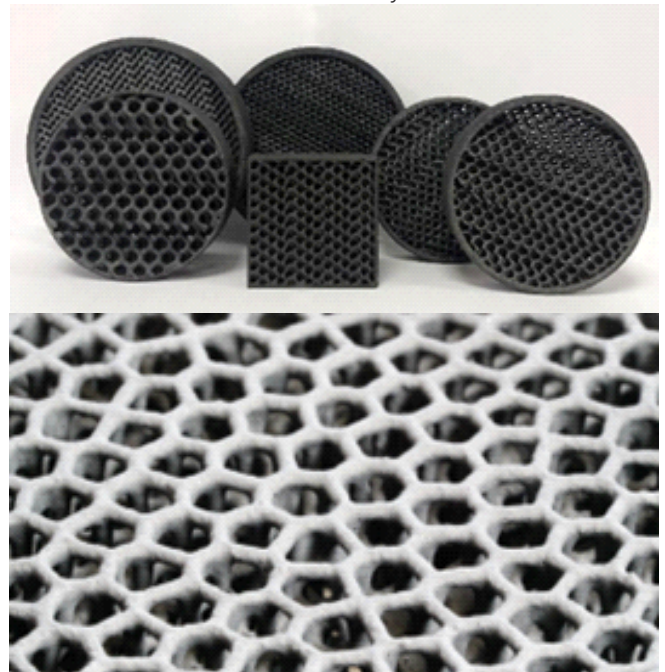


Figure 3 STELEX Optiflow 3D

3. The foundry industry is known for its energy-intensive operations. What innovative methods or solutions is Foseco India adopting to reduce energy consumption and carbon emissions?

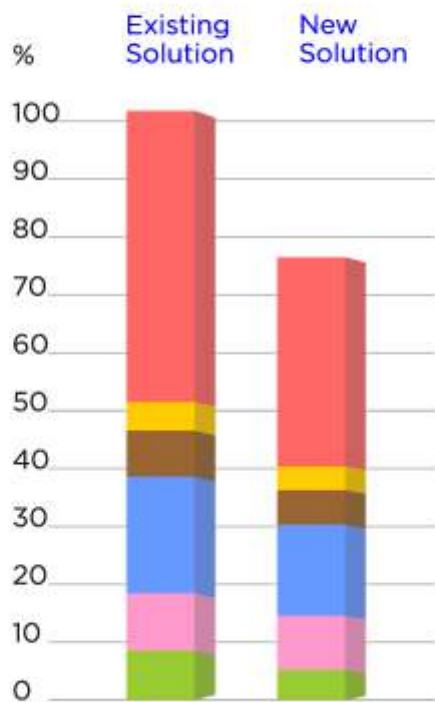
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Face to Face

intensive nature of the foundry industry by embracing innovative solutions aimed at reducing energy consumption and carbon emissions. Two noteworthy examples of their commitment to sustainability are ENERTEK and FEEDEX HD:

In response to the industry's energy challenges, Foseco has invested substantial R&D efforts into the development of thermally efficient ENERTEK crucibles, customized for electric resistance aluminum melting and holding furnaces. The utilization of ENERTEK crucibles allows businesses to significantly reduce their energy costs and lower their carbon footprint. These crucibles have proven effective, particularly in induction furnace operations for melting precious metals and continuous casting applications in the non-ferrous sector.



Figure 4 Enertek Crucibles

FEEDEX HD boasts high yield, exothermic properties, impressive strength, suitability for spot

applications, and cost-effective fettling. The combination of these attributes not only optimizes the casting process but also helps control production costs, contributing to enhanced energy efficiency and overall cost savings.



Figure 5 Feedex HD

4. As the world moves towards a more circular economy, how is Foseco India contributing to the recycling and reuse of materials in the casting and foundry processes?

Foseco India is at the forefront of contributing to the circular economy by actively promoting the recycling and reuse of materials in Aluminum

Secondary Cast Houses.

Recycling aluminum consumes only 5% of the energy required for its extraction from raw materials.

Foseco

assists these secondary cast houses in producing high-quality aluminum from lower quality scrap.

They achieve this through innovative metal cleaning solutions, like Flussum fluxes, this range is specially designed for being environment friendly, also helps generate lesser metal free dross and with increase yield, that not only enhance the quality of recycled aluminum but also result in substantial energy savings during the recycling process. Foseco's solutions are specifically designed to reduce aluminum losses in the dross in an eco-friendly manner, contributing to both energy conservation and waste minimization.

Furthermore, Foseco's innovations play a crucial role in extending the lifespan and efficiency of furnace linings, ultimately improving the productivity of secondary smelters. This not only enhances the sustainability of their processes but also supports the broader objective of reducing the environmental footprint of the foundry and casting industry.

5. What do you see as the key challenges and opportunities for the foundry industry in the coming years, and how is Foseco India preparing for them?

Of course, the foundry industry is poised to encounter both challenges and opportunities in the coming years, and Foseco India is proactively preparing to address them. Notably, there is a growing trend of stringent specifications

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Face to Face

from original equipment manufacturers (OEMs), who are imposing increasingly rigorous requirements on foundry products. Meeting these demanding standards can be challenging, and Foseco India is responding by investing in research and development to innovate and manufacture products that not only meet but exceed these specifications.

Furthermore, the aspect of Sustainability and Emission Regulation presents another significant challenge, as the foundry industry faces mounting pressure to comply with stricter emission regulations. Foseco India is taking this challenge head-on by introducing eco-friendly materials and processes, aligning with a sustainable and environmentally responsible approach.

On the flip side, amidst globalization, new opportunities are emerging for foundries to export their products. Foseco India recognises this and is actively working to enable tighter process controls in foundries. We offer a range of innovative products, solutions, and equipment for process control, including SMARTT, which aids foundries in meeting international quality standards. The Mini HDU units are another

example, enhancing the degassing and cleaning of aluminum alloys to meet the stringent requirements for global exports.



Figure 6 SMARTT

6. Foseco India has a long history in the industry. How has the company managed to stay at the forefront of innovation over the years, and what are your plans for continued innovation in the future?

Foseco India's enduring success and continued industry leadership can be attributed to a unique combination of factors that have shaped the company's approach to innovation. While it's crucial to respect and build upon its rich history, the company has consistently evolved to meet the dynamic demands of the foundry industry. Our sustained innovation is attributed to adaptability, substantial R&D investments, a strong focus on sustainability, customer-centricity, and a global perspective. The company continually adapts to stay ahead of the curve and address

the industry's ever-changing needs.

Looking ahead, Foseco India's plans for ongoing innovation involve remaining steadfast to these core principles while embracing emerging technologies to meet the evolving demands of the foundry industry. By maintaining a strong focus on sustainability, we are well-positioned to stay at the forefront of innovation in the years to come. ■

HCL Plans to Increase Copper Ore Production Capacity to 12.2 MTPA by FY'29



हिंदुस्तान कॉपर लिमिटेड
(भारत सरकार का उद्यम)
राष्ट्र का ताम्र खनिक

Hindustan Copper Ltd (HCL) said it is implementing expansion projects to increase its mine production capacity from the current level to 12.2 million tonnes per annum (MTPA) by FY 2028-29.

HCL Chairman and Managing Director Ghanshyam Sharma at the AGM told shareholders that the company has access to around 55 per cent of the copper ore reserves and resources in India with an average grade of 0.96 per cent.

"In FY 2022-23, the copper ore production in India was around 3.35 million tonnes. HCL is implementing a plan to increase its mining capacity from its current level of ore production to 12.2 MTPA in Phase-I in the next 6 to 7 years," Sharma said.

He added that the company has achieved ore production of 33.47 lakh tonnes during FY 2022-23 as against 35.70 lakh tonnes produced in FY 2021-22.

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VSM for the Metal Industry and eVSM is the Way Forward

The metal industry is a vast and integral part of the global economy, encompassing a wide range of activities related to the extraction, processing, and manufacturing of metallic materials and products. This industry plays a pivotal role in various sectors, serving as the backbone for essential applications in construction, automotive manufacturing, aerospace, electronics, and many more. To underscore its significance, consider the following statistics:

- The global metal industry contributes significantly to the world's Gross Domestic Product (GDP), with a substantial share in manufacturing and industrial output.
- It employs millions of people worldwide, ranging from miners and metallurgists to engineers and manufacturers, making it one of the largest employers globally.
- The industry consumes a substantial portion of global energy resources due to energy-intensive processes such as smelting and forging.
- Metals are essential components in everyday life, with billions of tons of metal products produced and consumed annually, making it a multi-trillion-dollar industry.

In this sector, Lean thinking provides a transformative framework that extends

across production, quality, cost management, supply chain, workforce development, sustainability, and technology integration. By optimizing manufacturing processes, improving quality control, reducing operational costs, and fostering a culture of continuous improvement, Lean principles enhance competitiveness, sustainability, and profitability. This holistic approach aligns with the industry's diverse challenges and positions metal companies to thrive



Kiran Deshpande
Country Manager,
India, RiA Cast House
Engineering
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in a dynamic and global marketplace while ensuring resource efficiency and environmental responsibility.

Value Stream Mapping (VSM) plays a pivotal role in the Lean journey within

the metal industry sector. VSM is a powerful visual tool that helps organizations understand and analyze their current state of operations while providing a clear roadmap for achieving a more efficient and productive future state. Here's how VSM contributes to the Lean journey in the metal industry:

1. **Current State Analysis:** VSM enables metal industry companies to thoroughly examine their existing processes, identifying bottlenecks, waste, and inefficiencies that hinder productivity and profitability.

This deep understanding of the current state serves as the foundation for targeted improvements.

2. **Visibility:** VSM offers a clear, visual representation of the end-to-end value stream, making it easier for cross-functional teams and

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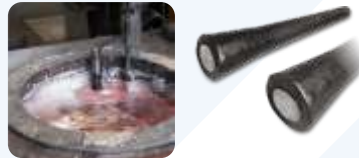
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Analysis

stakeholders to understand the flow of materials, information, and processes within the organization. This

established for each step of the value stream. This provides a measurable framework for tracking progress and ensuring



transparency fosters collaboration and alignment toward Lean goals.

3. Waste Identification: VSM highlights various forms of waste, such as overproduction, excess inventory, waiting times, and transportation delays. By pinpointing these sources of waste, metal industry companies can prioritize areas for improvement and waste elimination.
4. Future State Design: VSM is not just about analyzing the current state; it also serves as a tool to design a more efficient and streamlined future state. Teams collaboratively create a visual representation of the ideal state, incorporating Lean principles to eliminate waste and optimize processes.
5. Goal Setting: Through VSM, specific improvement goals and key performance indicators (KPIs) are

that Lean initiatives are on target.

6. Process Optimization: With VSM, metal industry companies can identify opportunities for process simplification, reduction of lead times, and improved resource allocation. This leads to enhanced productivity and cost reduction.
7. Continuous Improvement: VSM is a dynamic tool that encourages continuous improvement. As changes are implemented and results are measured, organizations can update their value stream maps to reflect new improvements and drive ongoing progress.
8. Standardization: VSM facilitates the standardization of best practices across the organization. It helps ensure that everyone understands and follows the improved processes, reducing variability and enhancing consistency.

9. Resource Allocation: By visualizing resource allocation across the value stream, organizations can make informed decisions about where to allocate people, machinery, and other resources for maximum efficiency.

Overall, Value Stream Mapping is a fundamental component of the Lean journey and it provides a structured approach to identify, prioritize, and implement improvements, driving productivity, profitability, and operational excellence. By visually representing the current state and collaboratively designing the future state, VSM empowers organizations to continuously evolve and thrive in a competitive marketplace.

While Value Stream Mapping (VSM) plays a crucial role in Lean implementation, the conventional VSM approach is time-consuming and often fails to fully leverage the team's efforts, mainly relying on paper or wall-based maps. The digital transformation of these maps is paramount for effective Lean deployment. However, the introduction of electronic Value Stream Mapping (eVSM) tools can significantly address these challenges and provide substantial advantages in the metal industry and other sectors. Here's how eVSM plays a crucial role:

1. Time Efficiency: eVSM streamlines the mapping process by providing pre-defined symbols, templates,



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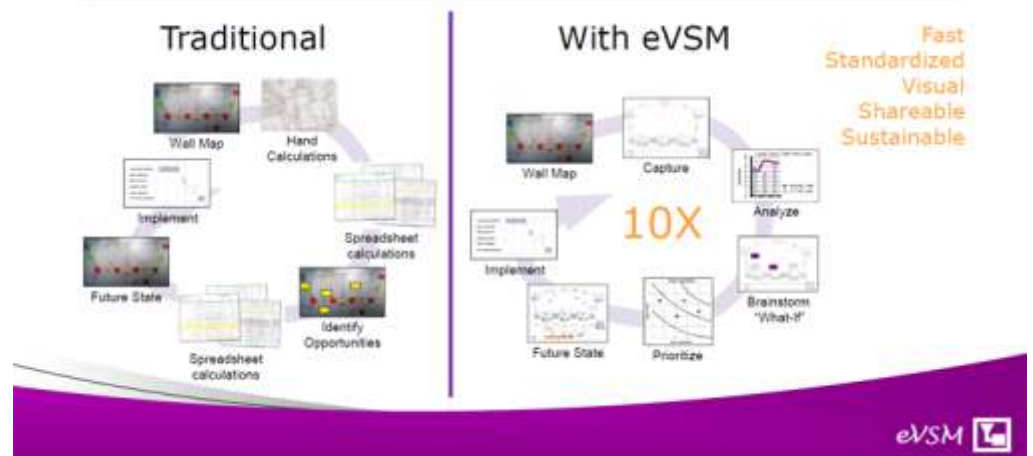
- and digital tools for drawing value stream maps. This reduces the time required to create and update maps, making the VSM process more efficient and allowing teams to focus on analysis and improvement.
2. Real-time Collaboration: eVSM facilitates real-time collaboration among cross-functional teams, even if team members are located in different geographic locations. This enables faster problem-solving and consensus-building, expediting the Lean improvement journey.
 3. Data Integration: eVSM tools can integrate with other digital systems, such as Enterprise Resource Planning (ERP) and Manufacturing Execution Systems (MES), to automatically pull in data on lead times, cycle times, and other critical metrics. This ensures that maps are based on accurate and up-to-date information.
 4. Digital Visualization: eVSM offers dynamic, digital visualization of value streams, making it easier to understand and communicate complex processes. Users can zoom in, zoom out, and navigate through maps to gain deeper insights.
 5. Version Control: With eVSM, version control is simplified, ensuring that the most current maps are always accessible and

reducing the risk of using outdated information for decision-making.

6. Goal Setting and Tracking: eVSM tools often include features for setting improvement goals, tracking progress, and generating reports and dashboards. This enhances transparency and accountability in the Lean journey.
7. Simulation and "What-If" Analysis: Some eVSM platforms offer simulation capabilities, allowing organizations to model different scenarios and assess the potential impact of changes before implementation.
8. Standardization: eVSM tools encourage standardization of symbols, metrics, and terminology, reducing variability and enhancing consistency across the organization.
9. Training and Onboarding: eVSM tools typically provide training resources and tutorials, making it easier for team members to learn how to create

Overall, eVSM represents a significant advancement in Lean practices by digitizing and automating the mapping process. It accelerates Lean initiatives in the metal industry and other sectors by saving time, improving accuracy, enhancing collaboration, and facilitating data-driven decision-making. As a result, organizations can reap the benefits of Lean thinking more efficiently and effectively. Furthermore, the traditional mapping method primarily focuses on one product at a time, whereas eVSM's Mix Model approach enables the consideration of all products within the value stream. This approach provides a clear visualization of shared activities and resources among different product variants. eVSM is specifically crafted to accommodate various map types, including those for production, supply network, and service. Its embedded analytics capabilities empower users to make data-driven decisions through insightful what-if analyses. Additionally, the inclusion of a built-in Kaizen management utility

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Analysis

enhances the potential of Kaizen events. This utility assists in prioritizing Kaizens by considering their impact value and ease of implementation, making it easier for teams to take ownership of individual Kaizen initiatives.

process, implementing lean principles, and introducing advanced scheduling and production planning techniques.

Findings and Implementations

A significant reduction in



The technical concepts addressed are shown below:



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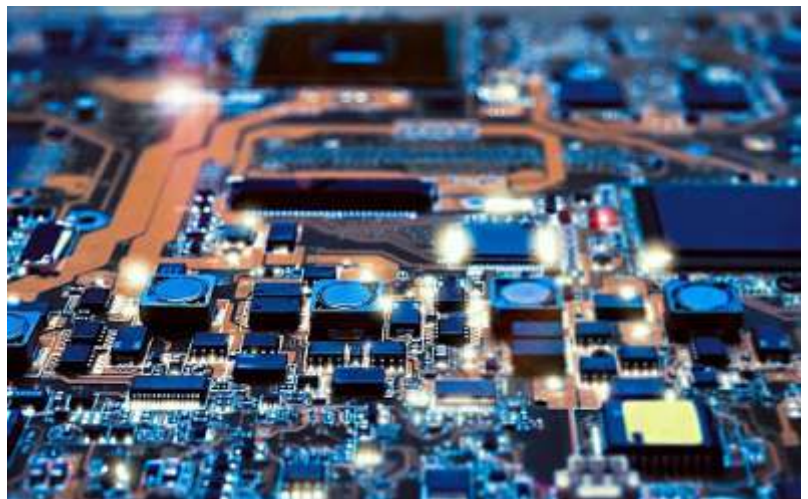
and automation for accuracy in inventory control, and estimating process step for potential cost reduction.

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Girish Hidaduggi
Manager Business Excellence
ITCube Solutions Pvt Ltd
eVSM Group
girish@evsm.com
+91 866 833 4045

A Pilot Case Study: BIG CASTINGS Pvt Ltd
Project Overview
The project "Unlocking Operational Efficiency: A Comprehensive Analysis of Value Stream Mapping and Inventory Control at Big Castings" stands as a testament to the impact of VSM and eVSM in the metal industry. Over a span of one month, the study focused on analyzing BIG CASTINGS Pvt Ltd's manufacturing

lead time (15.6%) was observed, from 5.51 days to 4.65 days, after comparing the current and future state maps. Key suggestions included raising awareness among staff about the importance of VSM, utilizing technology



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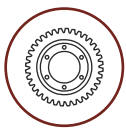


ARKEY CONFERENCE & ENGINEERING SERVICES

Tel.: 020 - 2567 2555, 2567 0808 Mobile: +91 97647 11315

gdctech@arkeycell.com, fftc@arkeycell.com

arkeyconference@arkeycell.com



Copper Ore & Copper Availability in India

Introduction: Copper demand in India is expected to grow due to thrust by government on “Make in India” and smart city programme, Atma Nirbhar Bharat in Defence, 100 GW target for renewable energy by 2022 and accelerated growth for EV industry. Copper is essential for EV technology. The projected demand for Copper due to EV is expected to increase by 1.7 MMT by the year 2027.

If per capita consumption for copper rises to world consumption levels, India's copper market will grow significantly. (Source: Indian Minerals Year Book 2019 & ICSG fact book 2021.) Per capita copper consumption in India is expected to increase from the current level of 0.6 Kg to 1 kg in coming years. The average per capita copper consumption in the world is 3.2 kg. Copper is the second largest non ferrous metal by usage with global demand of copper was ~ 25 MMT in the year 2020. Most copper ores in the world contain ~ 0.8% copper as against ~ 1.0 % in Indian copper ores. (Ref. Ministry of Mines, Govt.of India).

Indian Copper scenario: Hindustan Copper (Public sector unit), Hindalco (Birla group) and Sterlite (Vedanta group) are main players in India. (As shown in Table 1 below)

Table 1

| Sr. No | Company | Type of Cu producer & Location | Refined Cu Production capacity MT | Actual yearly production in MT | | | | |
|--------|----------|---|-----------------------------------|--------------------------------|--------|--------|--------|--------|
| | | | | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 |
| 1 | HCL | Integrated Cu producer. (Gujarat) | 68,500 | 25949 | 16215 | 5340 | Nil | 620.7* |
| 2 | BIRLA | Port based custom smelter. (Gujarat) | 500,000 | 413806 | 347000 | 325568 | 262203 | 358890 |
| 3 | STERLITE | Port based custom smelter (TN & Tuticorin, Daman, Diu). | 4,60,000 | 403206 | 90000 | 77490 | 101435 | 125104 |
| | Total | | 10,28,500 | 842961 | 453215 | 408398 | 363638 | 484615 |

*** HCL is focussing on direct sell of Copper concentrates.**

The major copper mines are the Khetri copper belt in Rajasthan, Singhbhum copper belt in Jharkhand and Malanjkhand copper belt in Madhya Pradesh which are mined by HCL; Singhbhum belt is mined by M/s Indian Copper Complex.

Malanjkhand copper deposit, located 20 km away from the Kanha National Park is the single largest copper deposit of India with nearly 70% of the country's reserve and contributing around 80% to HCL's total copper production. 90% of copper is found in Jharkhand.

Madhya Pradesh is the leading producer of copper in India. It accounts for producing 53% of copper in this country. Rajasthan accounts for 43%, and Jharkhand accounts for 4%

of copper production in India.



Figure 1: Precious copper mines- Chhotanagpur- Platue near Ghatshila (Jharkhand)



Dhiraj K. Chauhan
(Director, METCON)
Metallurgical
Consultants.



Figure2: Convoy of Loaded Trucks in a Copper Mine

The world copper scenario is presented for comparison in Table 2 below

The Biggest Digital Event In Asian Metallurgical Sector

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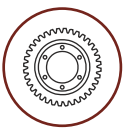
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Industry Update

Table 2

| Description | 2017 | 2018 | 2019 | 2020 |
|---|--------|--------|--------|--------|
| World mines (in Copper metal terms) production MMT | 20.038 | 20.579 | 20.571 | 20.634 |
| World refined copper (In refined Copper terms) production MMT | 23.523 | 24.063 | 24.016 | 24.510 |
| World refined copper consumption(in Copper metal terms) MMT | 23.789 | 24.48 | 24.405 | 24.989 |

Chile and Peru accounted for major mineral production.



Figure 3: Copper ore



Measures taken by the ministry for Copper Industry to boost copper production:

- 1) The ministry brought MMDR amendment act 2021 in March 2021. It will help increase the pace and participation of private sector in exploration and bring in advanced

- technology for exploration of mineral and level playing field will be available to public and private sector.
- 2) NMET to become an autonomous body to ramp up exploration by engaging public and private entities.
- 3) Validity of mining leases to continue even after the



expiry or termination till it is transferred to next lessee of the mine. This will ensure continuity of mining operations and production despite the change of lessee.

- 4) National Mineral policy 2019 provides that efforts shall be made to export minerals In value added form as far as possible.

- 5) Ministry is also working on ease of doing business and reducing compliance burden.

- 6) Ministry has developed Non ferrous metal scrap recycling Framework which focuses on developing a sustainable non ferrous metal recycling eco system with special focus on recycling of scrap metal.

- 7) Auction of two new copper mines to increase the production of copper ore has already been done at Thanewasna and Dubarpeth in Maharashtra. Recently exploration has started in Thanewasna.

HCL has chalked out an expansion plan to increase ore production from 3.6 MMT to 20 MMT per annum.

Operationalization of additional 1 MMT copper plant in Gujarat by private player is also likely.

Conclusion: It is seen that GOI is extending necessary support to Copper industry to enhance the copper minerals production as well as its exports. ■



Aluminium Recycling Industry wants nil import duty on scrap - MRAI

Indian aluminium demand is growing rapidly due to increase in population, urbanisation and industrialisation. It is an important metal for high value demand segments like infrastructure - Power, Transportation, Railways, Aerospace, Building & Construction, Renewable Energy and Consumer Durables to remain net zero economy by 2050.

India's growing appetite for aluminium industry is largely accounted by demand for aluminium recycling industry in India which is zoomed at a CAGR of 9-11% from fiscal 2015 and 2023, while

primary aluminium demand registered a CAGR of 1-2% only. India's automobile, power, railways, packaging, consumer durables and construction sectors are the key demand drivers for recycling aluminium industry. Looking to environment concerns, domestic primary aluminium manufacturers have the highest carbon intensity among global producers, with emissions of 14 tonnes of CO₂ equivalent per tonne of aluminium. Whereas, recycled aluminium industry emits only 0.3MT CO₂ per ton of recycled aluminium products.



Sanjay Mehta
President, MRAI

India's lower carbon-intensive aluminium recycled products demand is increasing day by day with newer applications with the growing appetite for environmentally friendly products due to its higher usage of scrap is another lever for decarbonisation.

While recycling aluminium industry is facing major challenges of domestic scrap collection due to lowest per capital consumption in India in past. As Aluminium has a long life cycle, there is always a long gap between a recycled product entering into services and its end of life. Given, India's fast paced growth, under the leadership of Prime Minister



Feature

Modi Ji, India is consuming much more materials than is available from End-of-Life products. Hence, the recycling industry relies on imports of Metal Scrap to meet the shortfall to ensure sustainable business.

"We strongly urge the Government must provide a level playing field for both primary and secondary sector as we believe both

government.

Overall, we request government policy makers should make zero per cent duty on metal scrap till India becomes the Atmanirbhar on the availability of sufficient quantity and quality of scrap, added by Mr. Mehta.

While highlighting the benefits of Secondary Aluminium Industry, Mohan Agarwal, MD, CMR Green

by Agarwal.

Highlighting the role of recycling in the Indian Economy, Mr. Dhawal Shah, Partner, Metco Ventures LLP emphasized that "India's secondary aluminium metal manufacturing sector is playing a larger role in the circular economy, sustainability and low-carbon economy to minimise the CO2 emission. Despite this, Primary aluminium producers often suggesting to impose higher import duty on aluminium scrap and also demanding scrap unfriendly BIS specifications, insufficient collection systems which can hinder the market growth" added further by Mr. Shah.

However, many countries like EU, UAE & South Africa have recognised that scrap is a critical raw material and have legislated to prevent its exports making it virtually impossible for us to import scrap. This is going to become more challenging ever after the execution of EU Waste Management Rule which will be effective from 1st Jan 2025 for the non-OECD countries. More importantly, India needs to have strategy for enhancing scrap imports as the world is shutting exports and domestic sourcing is limited. Though, the present policy regime is highly skewed in favour of primary producers and every day new barriers to recycling aluminium business are being erected by the primary sector – such as aggressively advocating tariff and non-tariff barriers on secondary producers, introducing unreasonable and un-implementable standards for raw materials etc. ■



are vital contributors to the national economy, for example, if customs duties are applicable on import of scrap, then commensurate export duties on the basis of total cost to country on primary products should also be levied. Further, the Standards on Scrap material should be formed after consultation with recycling aluminum industry and to support recycling it should be industry friendly and not restrictive in nature, else it will have a negative impact on the aluminum recycling industry which is supporting to minimize the carbon emission" as Sanjay Mehta, President, MRAI urged the

Technologies Ltd., mentioned that "the usage of Recycled aluminium, due to its monumental benefits of being environment friendly, being high quality, generating large employment and being cheaper is growing a very faster pace. While recycling does not generate any liquid or solid effluents and has CO2 imprint of only 0.3 mt per ton, every 1 mt of primary aluminium generates 14 mt of Co2 emission and 8 mt of hazardous land fill. Therefore, as a services to the future generations, we must promote recycled aluminium over primary aluminium as added further



Pradeep Goyal appointment as 1st President from India by ASM International

ASM International, the world's premier professional body of Materials Scientists, formed in the year 1913 in USA is well known for its pioneering work on promotion of knowledge on materials & processes. Evolution of ASM International has seen the formation of more than 90



Pradeep Goyal with Immediate past President Dr. Dave Williams

chapters across the globe, with a membership in excess of 20,000 engineers, research scientists, academicians and small and large organizations with the first chapter in India forming in the year 1979 at Mumbai.

Pradeep Goyal, a brilliant metallurgist from IIT Kanpur and post graduate from the prestigious MIT, USA, though fully aware about ASM, got involved with the India chapter activities on invitation from chapter officials only around 2003. With his keen business acumen and knowledge about Indian market scenario, he took up the responsibility of organizing a materials show, comprising of a conference & exhibition for transport materials - TRANSMAT 2004. It turned out to be a huge success. With the responsibility of the chapter Chair entrusted to him, he went on to add newer technical programs which helped in attracting research scientists and practicing engineers from different areas. Because of his dedicated and diligent work for promotion of materials science, other Indian chapters as well as other professional materials societies have shown interest in collaborating with ASM. He is truly being viewed as the face of Indian metallurgical fraternity. Govt. of India appointed him as a Member of the Technical Development Board. ASM International too, nominated him as a Member, Board of Trustees (BOT) of the ASM International in 2005 for 3 years. BOT is the governing body which decides the policies and provides strategic direction.

In 2014, he came up with yet another initiative of holding mega materials show – Materials Engineering Technology (MET) + Heat Treat Show (HTS) in focused areas such as

defense, transport, energy, infrastructure, etc. Success of the show has culminated in making it biennial and become the flagship Metallurgical event of the country. Mr. Pradeep Goyal convinced several large organizations and relevant ministries to come forward to support it. Many Cabinet Ministers and Industrialists have shared the dais as Chief Guests or Guests of Honour, including Shri Nitin Gadkari, Shri Manohar Parrikar, Shri Sajjan Jindal, Shri Anil Bhatt. All of them showered praise on the excellent quality of the event and its main organizer Mr. Goyal.

ASM HO too has taken due cognizance of the competence of Goyal & his influence on the materials science fraternity in India. Hence the ASM Board of Trustees nominated Mr. Goyal as the President of ASM International for the year 2023 – 24. It needs to be specially mentioned that, in the 110 years' history of ASM International, he is the first Indian to take up the prestigious position. He was bestowed with the honor in a glittering ceremony comprising of many past ASM presidents and eminent personalities on 18th October 2023 at the Marriott Renaissance Hotel, Detroit, USA.

Goyal is determined to use the position to put India firmly on the global map of materials science. We wish him All the Best in his new role.

EGA collaborate with DEWA to produce Solar-Powered Primary Aluminium

Emirates Global Aluminium (EGA) and Dubai Electricity and Water Authority (DEWA) announced its partnership that is expected to lead to the first-ever primary aluminium to be smelted via solar power.

The plan is part of a wider initiative by the government of Dubai to transform the city into the world's most sustainable city as well as developing it into a scientific and technology leader in the global metals sector.

Under the plan, DEWA will initially sell 560 thousand MWh from its Mohammed bin Rashid Al Maktoum Solar Park to EGA for its use at its aluminium smelting plant. The current expected output of solar-only primary aluminium, which will be sold under the name "CelestiAL," is 40 thousand metric tons, though production could increase at a later date with sufficient demand.

DEWA CEO and EGA Vice Chairman Saeed Mohammed Al Tayer said in a statement that the move is intended to help Dubai meet its clean energy goals.

Hydro launches Advanced Aluminium Recycling Facility in Michigan

The state-of-the-art aluminium recycling plant was officially opened on Thursday, November 16. From left: Emilie LaGrow, Village Manager Cassopolis, Hilde Merete Aasheim, President & CEO Hydro, Dre Kiser, Production Operator, Tyler First, Production Operator, Tore Onshuus Sandvik, State Secretary Labour Party, Jen Nelson, Chief



Operating Officer, Michigan Economic Development Corporation and Eivind Kallevik, Executive Vice President Hydro Aluminium Metal. Dre and Tyler, who have known each other since first grade, are holding a bumper beam for cars made with recycled aluminium.

On November 16, Hydro, a leading player in the aluminium industry, marked a significant milestone with the inauguration of its new recycling plant in Cassopolis, Michigan. The plant, which represents an investment of 150 million USD, was completed 18 months after groundbreaking. It is poised to produce an impressive 120,000 metric tons (approximately 132,277 U.S. tons) of recycled aluminium annually.

Hilde Merete Aasheim, President and CEO of Hydro, expressed her enthusiasm for the project, underscoring its strategic importance in a press release.

HZL expected to have stable performance - Arun Misra, CEO

Vedanta group firm Hindustan Zinc CEO Arun Misra has said the company is likely to deliver a stable performance in the coming quarters on the back of the government's thrust on expenditure on infrastructure and expectations of sustained growth in the country.

Notwithstanding the prevailing global uncertainty and the related challenges, projections on zinc demand in the country are promising, he said.

"There is an optimism of continued stable performance from the company in the coming quarters," Hindustan Zinc CEO Arun Misra said.

Estimates suggest further decline in global economic growth this year to 2.8 per cent from 3.4 per cent last year, he added.

The company, he said in the company's Integrated Annual Report 2022-23, is ideally placed to harness the strong demand and emerging growth opportunities, led by the Indian growth story.

"We look forward to many more operational, financial and sustainability-led milestones and celebrations in the year

ahead," he added.

He said going forward, the company is targeting higher production of mined and refined metal in the year ahead, complemented by increased saleable silver production.

"At the same time, we shall continue to scale new peaks in our journey towards the realisation of our ESG commitments," he said.

Hindustan Zinc is the world's second largest integrated zinc producer and fifth largest silver producer.

Vedanta Aluminium encourages STEM Education in rural Odisha



Vedanta Aluminium, India's largest producer of aluminium, recently supported the Rashtriya Bal Vaigyanik Pradarshani (National Young Scientist Exhibition), a national-level initiative by the National Council Of Educational Research & Training (NCERT), organised in Hemgir Block, Sundargarh district, Odisha. By regularly encouraging impactful educational initiatives such as this exhibition and the Suravi Children's Festival also held recently, Vedanta Aluminium demonstrates its commitment to transformative community development by building wider access to quality education and empowering young minds.

Hosted by the Govt. Higher Secondary School, Luabahal, the single-day event saw the enthusiastic participation of more than 200 students who exhibited over 284 projects. The students were drawn from classes 1 to 10 across 147 schools. In addition, numerous school officials, parents, and exhibition visitors were also present. The young students exhibited a deep awareness of their world through their exhibits, leveraging the possibilities of science to demonstrate unique solutions for society's needs, particularly in their immediate context. The exhibits thus included themes such as simplifying mathematical concepts, the importance of proper nutrition, the potential of solar energy, waste disposal systems, and even innovative recipes for using millets as a superfood. By supporting their efforts, the company also seeks to inspire students in remote and rural hinterlands to opt for higher education avenues in STEM (Science, Technology, Engineering & Mathematics) areas, and aspire for careers



in the field.

Highlighting Vedanta Aluminium's community focused initiatives, Mr. V Srikanth, CEO (Mines), Vedanta Ltd – Aluminium Business stated, "Our support for initiatives such as the National Young Scientist Exhibition reaffirms our commitment to fostering an environment where the scientific curiosity of children in our communities can flourish, and actively contribute to the progress of the wider community. We firmly believe in the transformative power of education and initiatives like these lay the groundwork for a promising tomorrow, where infinite opportunities abound."

Zinc batteries, a lithium alternative, set for new part supply in Japan

Japanese chemical group Nippon Shokubai will scale up production as early as next year of a main component in rechargeable zinc batteries, an emerging alternative to lithium-ion batteries, Nikkei has learned.

Mass production of separators for zinc batteries remains rare, and the development could give a major boost to the supply chain, helping to popularize a low-cost storage option for renewable energy.

Zinc holds the promise of overcoming the weaknesses of today's mainstream rechargeable batteries.

Lithium-ion batteries have a high energy density, making them good for applications like electric vehicles, but they also carry a high risk of fire. Nickel-metal hydride batteries are safer but have a lower energy density.

The supply chain for lithium-ion batteries also carries geopolitical risks, with China playing an outsized role in lithium processing. By contrast, zinc is found more widely throughout the world.

Developers in Japan, China and Europe are working to solve some of the problems with zinc batteries, which are prone to rapid loss of function after repeated charging cycles.

The larger the cells, the greater the cost reduction is associated with zinc batteries. This makes them a potential low-cost option for renewable energy projects that require large amounts of storage capacity.

Separators keep the two electrodes apart in batteries. Nippon Shokubai has developed separators that help reduce the buildup of crystals on zinc battery electrodes, which degrades performance.

The company has increased the daily production capacity by 450 times to 1,800 square meters.

Nippon Shokubai has begun providing the separators to several domestic and overseas manufacturers for testing, and aims to begin full-scale production as early as 2024.

Lithium batteries can discharge all at once at a high output, while zinc is better suited for applications in which a constant amount is discharged over a long period of time, according to Nippon Shokubai.

Research group Fuji Keizai forecasts the market for rechargeable batteries used in renewable energy and other power storage systems to grow to 5.44 trillion yen (\$36.4 billion) in 2035, nearly four times the level of 2021. Lithium-ion batteries now account for around 80% of the total.

Given the amount of lithium reserves and mining, some analysts believe it will be difficult to meet all potential rechargeable battery demand with lithium-ion batteries. Zinc is seen as an option to lower the industry's dependence on lithium.

BALCO raises Health awareness



Bharat Aluminium Company Limited (BALCO), India's iconic aluminium producer and a subsidiary of Vedanta Aluminium, recently held a two-day District-Level

Teachers Training program

on Menstrual Health & Hygiene Management (MHM) in collaboration with the Sarthak Jan Vikas Sansthan and the District Education Department of Korba. Organized as a part of BALCO's project Nayi Kiran, the training aimed to equip educators with the knowledge and skills needed to become advocates for MHM in their respective schools and promote a more empathetic environment surrounding menstruation.

The program was led by Mr. Om Prakash, an MHM Subject Matter Expert, and covered a wide array of topics over the course of two days. The comprehensive training included a wide spectrum of topics, including understanding the menstrual cycle, addressing myths and taboos, promoting health and nutrition, exploring gender-related issues, and creating MHM-friendly school environments. This session featured specialized modules and took place at Divya Jyoti School, catering to more than 55 children from the district.

The MHM Awareness Sessions conducted as part of Project Nayi Kiran have successfully reached out to over 6,800 adolescent girls and boys across 30 government secondary and higher schools in the Korba District. The workshop played a pivotal role in elevating awareness around menstrual health and hygiene among educators, thereby impacting over 70 teachers representing 56 government secondary and higher schools in the Korba District.



Indian Auto industry reports highest ever production and sales for October: SIAM



As per the SIAM data, the total production of Passenger Vehicles, Three-wheelers, Two-wheelers, and Quadricycle in October 2023 was 26,21,248 units. For passenger vehicles in particular, the segment saw 15.9 percent growth year-on-year (YoY) - a record milestone. The domestic sales figures for October 2023 in detail: Passenger Vehicle sales - 389,714 units; Three-wheelers - 76,940 units; and Two-wheelers - 1,895,799 units.

Earlier in October, SIAM reported that the sales of entry-level cars slumped 75 percent to 35,000 units in the three months through September from a year earlier. Sales of motorcycles and scooters – favoured modes of transport in villages due to their affordability – also fell 39 percent and 25 percent respectively.

Farm wages have remained subdued after a ban on wheat and rice exports hurt rural incomes. India's June-September rainfall, which waters half of the country's farmland, also remained deficient, threatening crop harvests and adding to rural stress, it added.

Commenting on sales data of October 2023, Mr Vinod

Aggarwal, President, SIAM said, "Both Passenger Vehicles and Three-Wheelers have posted highest ever sales of October, while Two-Wheeler segment has also posted good sales in the month of October 2023. All the three segments have posted double-digit growth. This growth momentum is encouraging for the industry which has been enabled by sustained conducive policies of the Government and the ongoing festive season."

Commenting on October 2023 performance, Mr Rajesh Menon, Director General, SIAM said, "Passenger Vehicles posted the highest ever sales of October of 3.90 Lakh units, with a growth of 15.9%, compared to last year. Three-Wheelers also reported a decent growth of 42.1%, posting sales of about 0.77 lakh units in October 2023. 18.96 Lakh Units of Two-Wheelers were sold in October 2023, with a growth of 20.1%, as compared to October 2022."

Table : 2, 3 6

| SIAM | | | | | | |
|--|------------------|------------------|------------------|------------------|-----------------|-----------------|
| Segment wise Comparative Production, Domestic Sales & Exports data for the month of October 2023 | | | | | | |
| Category Segment/Subsegment | Production | | Domestic Sales | | Exports | |
| | October | | October | | October | |
| | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 |
| Passenger Vehicles (PVs)* | | | | | | |
| Passenger Cars | 1,70,622 | 1,56,250 | 1,40,926 | 1,30,046 | 33,045 | 35,167 |
| Utility Vehicles (UVs) | 1,51,457 | 2,13,386 | 1,41,254 | 1,98,356 | 14,614 | 17,859 |
| Vans | 8,910 | 12,759 | 8,933 | 12,975 | 1 | 894 |
| Total Passenger Vehicles (PVs) | 3,30,989 | 3,82,395 | 2,91,113 | 3,41,377 | 47,660 | 53,920 |
| Three Wheelers | | | | | | |
| Passenger Carrier | 73,253 | 93,781 | 41,246 | 60,889 | 34,038 | 24,888 |
| Goods Carrier | 5,936 | 11,734 | 10,326 | 11,859 | 217 | 646 |
| E-Rickshaw | 2,629 | 4,579 | 2,323 | 4,124 | - | - |
| E-Cart | 293 | 268 | 259 | 268 | - | - |
| Total Three Wheelers | 86,111 | 1,10,380 | 54,154 | 76,940 | 34,255 | 25,534 |
| Two Wheelers | | | | | | |
| Scooter/ Scooterette | 5,14,355 | 6,26,361 | 5,13,450 | 5,89,802 | 30,151 | 44,052 |
| Motorcycle/Step-Throughs | 12,17,910 | 14,54,106 | 10,20,295 | 12,52,835 | 2,56,934 | 2,46,876 |
| Mopeds | 41,855 | 47,851 | 44,838 | 53,162 | 234 | 348 |
| Total Two Wheelers | 17,73,920 | 21,28,118 | 15,78,383 | 18,95,799 | 2,87,319 | 2,91,276 |
| Quadricycle | 133 | 355 | 71 | 81 | 84 | 300 |
| Grand Total | 21,91,153 | 26,21,248 | 19,23,721 | 23,14,197 | 3,69,318 | 3,71,030 |

* BMW, Mercedes, JLR, Tata Motors and Volvo Auto data is not available
Society of Indian Automobile Manufacturers | 10/11/2023



| STAT | | | | | | |
|---|--------------------|--------------------|--------------------|--------------------|------------------|----------------------------------|
| Summary Report: Cumulative Production, Domestic Sales & Exports data for the period of April-October 2023 | | | | | | |
| | | | | | | Report I (Number of Vehicles) |
| Category Segment/Subsegment | Production | | Domestic Sales | | Exports | |
| | April-October | | April-October | | April-October | |
| | 2022-23 | 2023-24 | 2022-23 | 2023-24 | 2022-23 | 2023-24 |
| Passenger Vehicles (PVs)* | | | | | | |
| Passenger Cars | 12,61,022 | 11,87,356 | 10,20,946 | 9,40,267 | 2,34,745 | 2,50,681 |
| Utility Vehicles (UVs) | 12,62,751 | 15,27,861 | 11,23,708 | 13,85,309 | 1,33,177 | 1,35,109 |
| Vans | 83,617 | 85,779 | 83,263 | 86,761 | 244 | 4,824 |
| Total Passenger Vehicles (PVs) | 26,07,390 | 28,00,996 | 22,27,917 | 24,12,337 | 3,68,166 | 3,90,674 |
| Three Wheelers | | | | | | |
| Passenger Carrier | 4,24,313 | 5,21,037 | 1,82,804 | 3,31,109 | 2,43,971 | 1,79,007 |
| Goods Carrier | 56,180 | 63,891 | 53,323 | 61,450 | 2,410 | 1,621 |
| E-Rickshaw | 12,784 | 21,075 | 12,749 | 22,114 | - | - |
| E-Cart | 1,932 | 1,795 | 1,890 | 1,957 | - | - |
| Total Three Wheelers | 4,95,209 | 6,07,708 | 2,50,766 | 4,16,630 | 2,46,381 | 1,80,628 |
| Two Wheelers | | | | | | |
| Scooter/ Scooterette | 34,96,618 | 37,45,304 | 32,77,577 | 34,55,174 | 2,57,775 | 3,09,007 |
| Motorcycle/Step-Throughs | 84,97,931 | 85,86,141 | 64,27,012 | 69,03,962 | 21,32,607 | 16,67,114 |
| Mopeds | 2,64,100 | 2,79,112 | 2,72,258 | 2,78,069 | 1,782 | 1,062 |
| Total Two Wheelers | 1,22,58,649 | 1,25,90,557 | 99,76,847 | 1,06,35,205 | 23,92,164 | 19,77,183 |
| Quadricycle | 1,132 | 2,588 | 361 | 540 | 828 | 2,078 |
| Grand Total | 1,53,62,380 | 1,60,01,849 | 1,24,55,891 | 1,34,64,712 | 30,07,539 | 25,50,623 |

* BMW, Mercedes, JLR, Volvo Auto data is not available and Tata Motors data is available for April-September only
 Society of Indian Automobile Manufacturers (SIAM) 2023

| STAT | | | | | | | | | | | | |
|--|--|---------------|-----------------|-----------------|----------------|---------------|-----------------|-----------------|--------------|--------------|---------------|-----------------------------------|
| Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of October 2023 and Cumulative for April-October 2023 | | | | | | | | | | | | |
| | | | | | | | | | | | | Report IV (Number of Vehicles) |
| Category Segment/Subsegment Manufacturer | Production | | | | Domestic Sales | | | | Exports | | | |
| | October | | April-October | | October | | April-October | | October | | April-October | |
| | 2022 | 2023 | 2022-23 | 2023-24 | 2022 | 2023 | 2022-23 | 2023-24 | 2022 | 2023 | 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. | | | | | | | | | | | |
| UVC : Length < 4000 mm & Price <20 Lakhs | | | | | | | | | | | | |
| Honda Cars India Ltd (WR-V) | 630 | - | 4,440 | - | 653 | - | 3,950 | - | 88 | - | 375 | 266 |
| Jyundai Motor India Ltd (Aster/Venue) | 10,050 | 20,115 | 74,044 | 1,17,113 | 9,585 | 19,678 | 70,871 | 1,08,130 | 498 | 1,096 | 3,008 | 9,539 |
| Ka Motors India Pvt Ltd (Sonet) | 5,889 | 5,693 | 70,623 | 72,193 | 7,614 | 6,493 | 52,716 | 45,559 | 1,123 | 2,396 | 17,537 | 27,142 |
| Mahindra & Mahindra Ltd (Bolero/Kuv100/Thar X) | 17,318 | 20,653 | 1,18,474 | 1,41,451 | 18,720 | 20,744 | 1,19,011 | 1,38,779 | 618 | 45 | 3,511 | 3,155 |
| Manifi Suzuki India Ltd (OEM Model #, Brezza -Fr) | 3,915 | 33,350 | 1,27,492 | 2,01,142 | 3,941 | 29,250 | 76,768 | 1,57,268 | 567 | 4,229 | 29,813 | 9,751 |
| Nissan Motor India Pvt Ltd (Magneite) | 4,169 | 1,308 | 27,927 | 23,045 | 2,819 | 2,573 | 19,887 | 17,223 | 2,384 | 896 | 5,236 | 3,855 |
| PCA Motors Pvt. Ltd (C3,EC3) | 1,302 | 222 | 4,229 | 5,211 | 1,160 | 401 | 3,950 | 4,431 | - | 25 | - | 1,126 |
| Renault India Pvt Ltd (Kiger -fiber) | 7,471 | 1,097 | 51,718 | 23,508 | 5,884 | 2,997 | 38,388 | 22,379 | 229 | 1,318 | 9,543 | 6,538 |
| Tata Motors Ltd* (Nixon/Punch) | NA | NA | 1,52,757 | 1,53,351 | NA | NA | 1,52,210 | 1,51,601 | NA | NA | 623 | 490 |
| Toyota Kirloskar Motor Pvt Ltd (Urban Cruiser) | - | - | - | - | - | - | 22,158 | - | - | - | - | - |
| Total UVC | 59,744 | 85,849 | 6,31,700 | 7,40,014 | 55,396 | 82,140 | 5,59,981 | 6,75,370 | 5,507 | 9,995 | 69,746 | 61,862 |
| UV1 : Length 4000 to 4400 mm & Price <20 Lakhs | | | | | | | | | | | | |
| Force Motors Ltd (Gurkha) | 0 | 2 | 425 | 12 | 50 | - | 448 | - | - | - | - | 2 |
| Honda Cars India Ltd (Amaze) | - | 5,489 | - | 14,151 | - | 4,957 | - | 13,464 | - | 24 | - | 28 |
| Jyundai Motor India Ltd (Creta) | 13,569 | 13,234 | 1,02,800 | 99,877 | 1,860 | 13,077 | 87,362 | 90,770 | 1,897 | 205 | 15,425 | 2,718 |
| Ka Motors India Pvt Ltd (Seltos) | 12,957 | 14,040 | 88,230 | 68,953 | 9,777 | 12,367 | 59,817 | 58,214 | 3,040 | 227 | 27,591 | 10,327 |
| Manifi Suzuki India Ltd (OEM Model #, Eniga/Grand Vitara) | 11,314 | 16,257 | 65,843 | 95,093 | 5,540 | 25,043 | 94,206 | 1,40,458 | 650 | 2,764 | 4,028 | 22,676 |
| MG Motor India Pvt Ltd (Astor) | 7,060 | 1,008 | 11,529 | 4,765 | 1,774 | 890 | 9,351 | 5,746 | - | - | - | - |
| Nissan Motor India Pvt Ltd (Kicks) | - | - | 1,242 | - | 242 | - | 1,052 | - | - | - | - | 16 |
| PCA Motors Pvt. Ltd (C3/Aircross) | - | 346 | - | 1,483 | - | 224 | - | 674 | - | - | - | - |
| ScootAuto India Pvt Ltd (Kushaq) | 1,603 | 3,156 | 14,468 | 15,512 | 1,691 | 2,447 | 15,057 | 16,490 | 64 | 23 | 259 | 622 |
| Toyota Kirloskar Motor Pvt Ltd (Mode Manufact.) | 10,590 | 18,111 | 18,365 | 1,17,893 | 3,384 | 4,779 | 4,547 | 28,191 | 1,337 | - | 9,599 | 9,599 |
| Volkswagen India Pvt Ltd (Taigun) | 5,810 | 3,625 | 15,358 | 20,050 | 2,355 | 2,219 | 12,000 | 12,109 | 1,551 | 694 | 2,435 | 7,441 |
| Total UV1 | 55,817 | 75,330 | 3,35,999 | 4,34,155 | 49,699 | 65,998 | 2,83,850 | 3,78,066 | 7,071 | 5,274 | 50,329 | 54,031 |
| UV2 : Length between 4400 - 4700 mm & Price <20 Lakhs | | | | | | | | | | | | |
| Jyundai Motor India Ltd (Alcazar) | 3,667 | 2,564 | 21,904 | 19,973 | 2,847 | 1,837 | 17,037 | 13,349 | 319 | 756 | 4,810 | 6,596 |
| Ka Motors India Pvt Ltd (Csrans) | 6,205 | 5,645 | 44,992 | 45,430 | 5,479 | 5,355 | 40,500 | 40,567 | 542 | 733 | 4,151 | 5,134 |
| Mahindra & Mahindra Ltd (Marazzo/Scorpio/XUV5) | 12,326 | 22,990 | 80,060 | 1,21,814 | 13,465 | 22,954 | 79,826 | 1,19,833 | 114 | 511 | 767 | 3,510 |
| Manifi Suzuki India Ltd (XL6) | 2,452 | 4,879 | 23,743 | 27,422 | 2,464 | 4,367 | 23,627 | 20,472 | 20 | 301 | 65 | 677 |
| MG Motor India Pvt Ltd (Hecla) | 1,788 | 2,713 | 13,764 | 18,967 | 1,630 | 2,703 | 13,123 | 17,591 | 12 | - | 12 | - |
| Tata Motors Ltd* (Tiamer/Safari) | NA | NA | 30,153 | 21,565 | NA | NA | 20,252 | 20,523 | NA | NA | 5 | - |
| Total UV2 | 26,936 | 38,691 | 2,14,616 | 2,55,275 | 25,908 | 37,228 | 2,03,354 | 2,38,335 | 1,507 | 2,301 | 9,751 | 16,288 |
| UV3 : Length >4700 mm & Price <20 Lakhs | | | | | | | | | | | | |
| Force Motors Ltd (rax) | - | 132 | (4) | 765 | - | 85 | - | 685 | - | - | - | - |
| Isuzu Motors India Pvt Ltd (Hi-Lander/V-Cross) | 151 | - | 1,724 | 50 | 50 | 60 | 324 | 256 | 248 | - | 477 | - |
| Toyota Kirloskar Motor Pvt Ltd (Innova Crysta/Innova) | 2,957 | 8,407 | 39,448 | 56,073 | 3,738 | 8,183 | 39,840 | 55,657 | - | - | - | - |
| Total UV3 | 3,008 | 8,539 | 41,168 | 56,894 | 3,794 | 8,338 | 40,164 | 56,597 | 248 | - | 477 | 1 |

* Only cumulative data is available for April-Sep. ** Not Available

Utility production volume of C-UV Model is reported by Mahindra Suzuki India Limited.



Statistics

| SEUV | | | | | | | | | | | | |
|--|-----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|------------------|---------------|----------------------|-----------------|-----------------|
| Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of October 2023 and Cumulative for April-October 2023 | | | | | | | | | | | | |
| | | | | | | | | | | Report IV | | |
| | | | | | | | | | | (Number of Vehicles) | | |
| Category | Production | | | | Domestic Sales | | | | Exports | | | |
| Segment/Subsegment | October | | April-October | | October | | April-October | | October | | April-October | |
| Manufacturer | 2022 | 2023 | 2022-23 | 2023-24 | 2022 | 2023 | 2022-23 | 2023-24 | 2022 | 2023 | 2022-23 | 2023-24 |
| UV4 : Price between Rs. 20 to 30 Lakh | | | | | | | | | | | | |
| UCV India Automobiles Pvt Ltd (Jeep Compass) | 1,070 | 501 | 8,829 | 3,392 | 732 | 358 | 5,678 | 2,019 | 169 | 109 | 2,518 | 1,458 |
| Force Motors Ltd (Gurkha) | - | - | - | 2 | - | - | - | - | - | - | - | - |
| Hyundai Motor India Ltd (Kona, Tucson) | 664 | 6 | 2,943 | 2,583 | 593 | 246 | 2,133 | 2,529 | - | - | - | - |
| Kia Motors India Pvt Ltd (Carnival) | 300 | - | 2,060 | - | 301 | - | 2,075 | - | - | - | - | - |
| Mahindra & Mahindra Ltd (Alto, Xplore G4) | 5 | - | 436 | - | 43 | - | 471 | - | - | - | - | - |
| Maruti Suzuki India Ltd (Wrivio) | - | - | - | - | - | 478 | - | 2,417 | - | - | - | - |
| MG Motor India Pvt Ltd (ZS EV) | 1,000 | NA | 2,067 | 1,871 | 784 | NA | 2,874 | 1,747 | - | - | - | - |
| Honda Motors Pvt Ltd (OS Aircross) | 22 | 1 | 197 | 34 | 15 | 5 | 185 | 48 | - | - | - | - |
| Toyota Kirloskar Motor Pvt Ltd (Model Manu) | - | 714 | - | 3,022 | - | - | - | - | - | - | - | - |
| Total UV4 | 2,361 | 1,221 | 16,360 | 11,204 | 2,465 | 1,127 | 13,360 | 6,780 | 169 | 109 | 2,518 | 1,458 |
| UV5 : Price >Rs. 30 Lakh | | | | | | | | | | | | |
| UCV India Automobiles Pvt Ltd (Jeep Meridian) | 576 | 283 | 3,112 | 2,678 | 404 | 109 | 2,822 | 1,482 | 172 | 180 | 311 | 1,467 |
| Hyundai Motor India Ltd (Ioniq5) | - | 122 | - | 542 | - | 117 | - | 907 | - | - | - | - |
| Suzuki Motors India Pvt Ltd (MU-X) | - | - | 49 | 34 | 3 | 1 | 32 | 26 | - | - | - | - |
| Kia Motors India Pvt Ltd (EV9) | - | - | 15 | - | 152 | 141 | 168 | 627 | - | - | - | - |
| MG Motor India Pvt Ltd (Glacier) | 160 | 250 | 1,240 | 2,057 | 170 | 247 | 1,212 | 1,700 | - | - | - | - |
| Skoda Auto India Pvt Ltd (Kodiac) | 62 | 205 | 833 | 2,575 | 55 | 176 | 635 | 1,258 | - | - | - | - |
| Toyota Kirloskar Motor Pvt Ltd (Fortuner, Hilux, Innova) | 2,117 | 2,080 | 17,150 | 20,635 | 2,110 | 2,038 | 17,383 | 21,207 | - | - | 45 | 2 |
| Volvo Cars India Pvt Ltd (Equinox) | 75 | 216 | 713 | 1,388 | 87 | 53 | 773 | 884 | - | - | - | - |
| Total UV5 | 2,991 | 3,756 | 22,908 | 30,319 | 2,994 | 3,627 | 22,999 | 28,181 | 112 | 180 | 356 | 1,469 |
| Total Utility Vehicles (UVs) | 1,51,467 | 2,13,366 | 12,62,751 | 15,27,881 | 1,41,254 | 1,38,356 | 11,23,708 | 13,95,309 | 14,614 | 17,869 | 1,33,177 | 1,35,109 |
| Vans | | | | | | | | | | | | |
| CVans : Generally 1 or 1.5 box; seats upto 5 to 10 | | | | | | | | | | | | |
| V1 : Hard tops mainly used for personal transport, Price upto Rs. 10 Lakh | | | | | | | | | | | | |
| Mahindra & Mahindra Ltd (Maxx pro, Supro) | - | 36 | 1,843 | 210 | 61 | - | 1,467 | - | - | 28 | - | 76 |
| Maruti Suzuki India Ltd (Eeco) | 5,309 | 12,724 | 78,030 | 85,454 | 5,831 | 12,975 | 78,371 | 80,694 | 1 | 666 | 189 | 4,825 |
| Tata Motors Ltd* (Magic Express) | NA | NA | 2,023 | - | NA | NA | 3,283 | 5,148 | NA | NA | 36 | - |
| Total V1 | 8,910 | 12,750 | 83,404 | 85,704 | 8,922 | 12,975 | 83,111 | 85,842 | 1 | 694 | 224 | 4,800 |
| V2 : Soft tops mainly used as Maxi Cabs, Price upto Rs. 10 Lakh | | | | | | | | | | | | |
| Mahindra & Mahindra Ltd (Supro) | - | - | 153 | - | 1 | - | 100 | 111 | - | - | - | - |
| Tata Motors Ltd* (Magic Iris) | NA | NA | 60 | 75 | NA | NA | 62 | 300 | NA | NA | 20 | 54 |
| Total V2 | 8,910 | 12,750 | 83,617 | 85,779 | 8,923 | 12,975 | 83,263 | 86,761 | 1 | 694 | 244 | 4,884 |
| Total Passenger Vehicles (PVs) | 3,30,389 | 3,82,395 | 26,07,390 | 28,00,995 | 2,91,113 | 3,41,377 | 22,27,917 | 24,12,337 | 47,660 | 53,920 | 3,58,166 | 3,90,674 |

* Only published data is available for April-Sep. NA=Not Available

| M1A1 | | | | | | | | | | | | |
|--|-----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|------------------|-----------------|----------------------|-----------------|-----------------|
| Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of October 2023 and Cumulative for April-October 2023 | | | | | | | | | | | | |
| | | | | | | | | | | Report IV | | |
| | | | | | | | | | | (Number of Vehicles) | | |
| Category | Production | | | | Domestic Sales | | | | Exports | | | |
| Segment/Subsegment | October | | April-October | | October | | April-October | | October | | April-October | |
| Manufacturer | 2022 | 2023 | 2022-23 | 2023-24 | 2022 | 2023 | 2022-23 | 2023-24 | 2022 | 2023 | 2022-23 | 2023-24 |
| B : Motorcycle/Step-Through: Big wheel size – more than 12" | | | | | | | | | | | | |
| B1: Engine capacity <75 CC | | | | | | | | | | | | |
| India Kawasaki Motors Pvt Ltd (KX65) | - | - | - | - | - | 1 | - | 3 | - | - | - | - |
| Total B1 | | | | | | 1 | | 3 | | | | |
| B2: Engine Capacity >75 CC but less than equal to 110 CC | | | | | | | | | | | | |
| Bajaj Auto Ltd (Boxer, C1, Discover, Plasma) | 1,51,970 | 1,55,836 | 9,28,794 | 7,05,882 | 85,681 | 83,273 | 4,15,822 | 3,62,832 | 79,662 | 58,257 | 5,03,286 | 3,86,810 |
| Hero MotoCorp Ltd (HF Deluxe, Passion, Splendor) | 3,28,897 | 4,30,220 | 24,70,269 | 25,79,309 | 3,43,961 | 4,46,107 | 24,84,144 | 25,94,055 | 5,028 | 4,986 | 52,192 | 37,062 |
| Hero's Motorcycle & Scooter India Pvt Ltd (Dread) | 19,214 | 49,954 | 1,57,430 | 2,27,270 | 15,344 | 46,486 | 1,27,552 | 2,03,248 | 4,000 | 2,068 | 33,986 | 17,084 |
| India Kawasaki Motors Pvt Ltd (KX85) | - | - | - | - | - | 2 | - | 2 | - | - | - | - |
| India Yamaha Motor Pvt Ltd (Cruz, Saluto IX) | 1,758 | 1,704 | 20,093 | 21,806 | - | - | - | - | 1,640 | 2,422 | 20,684 | 19,119 |
| TVS Motor Company Ltd (Radeon, Sport Star City) | 50,467 | 50,545 | 3,98,745 | 3,44,721 | 39,693 | 47,025 | 2,10,119 | 2,20,198 | 23,092 | 1,878 | 1,84,361 | 1,15,410 |
| Total B2 | 5,57,294 | 6,93,165 | 39,76,321 | 38,76,888 | 4,64,269 | 6,23,493 | 32,37,609 | 33,80,435 | 1,13,420 | 70,971 | 8,04,613 | 5,85,585 |
| B3: Engine Capacity >110 CC but less than equal to 125 CC | | | | | | | | | | | | |
| Bajaj Auto Ltd (Boxer, C1, Discover, Husqvarna, K1) | 1,09,574 | 1,25,030 | 6,55,817 | 7,18,378 | 73,148 | 1,00,457 | 4,17,337 | 5,18,056 | 25,660 | 26,983 | 2,34,306 | 1,56,152 |
| Hero MotoCorp Ltd (Glamour, Splendor) | 54,834 | 98,517 | 4,18,622 | 3,95,518 | 56,735 | 60,878 | 4,10,894 | 3,75,009 | 2,355 | 2,162 | 19,010 | 10,860 |
| Hero's Motorcycle & Scooter India Pvt Ltd (C11 Si) | 1,30,845 | 1,31,763 | 8,65,434 | 7,55,507 | 1,39,816 | 1,31,816 | 8,62,036 | 7,37,258 | 3,230 | 2,130 | 22,721 | 13,542 |
| India Kawasaki Motors Pvt Ltd (KX112) | - | - | - | - | - | 1 | - | - | - | - | - | - |
| India Yamaha Motor Pvt Ltd (Saluto, Y1125) | 4,350 | 3,651 | 29,436 | 29,698 | - | - | - | - | 4,350 | 2,070 | 29,458 | 17,738 |
| Suzuki Motorcycle India Pvt Ltd (Hayate) | - | 500 | 1,508 | 1,500 | - | - | - | - | 285 | 240 | 1,932 | 1,520 |
| TVS Motor Company Ltd (Rider Star City 125, M) | 53,845 | 85,242 | 3,87,268 | 5,27,115 | 24,153 | 47,483 | 57,747 | 2,75,751 | 27,232 | 51,893 | 2,85,572 | 2,57,538 |
| Total B3 | 3,46,448 | 4,14,313 | 23,77,991 | 24,16,777 | 2,84,952 | 3,40,635 | 17,88,614 | 19,09,136 | 63,118 | 85,368 | 5,93,641 | 4,57,450 |
| B4: Engine Capacity >125 CC but less than equal to 150 CC | | | | | | | | | | | | |
| Bajaj Auto Ltd (Boxer, CT 150, Pulsar) | 22,770 | 46,910 | 2,82,069 | 2,37,056 | 18,138 | 32,880 | 1,28,116 | 1,46,145 | 11,050 | 16,810 | 1,78,640 | 84,823 |
| Hero MotoCorp Ltd (Jura) | 3,094 | 3,480 | 22,397 | 21,691 | - | - | - | - | 2,711 | 3,471 | 23,333 | 23,713 |
| Hero's Motorcycle & Scooter India Pvt Ltd (CB U) | - | - | 200 | 64 | - | - | - | - | - | - | 240 | 56 |
| India Yamaha Motor Pvt Ltd (FZ-SZ) | 26,818 | 27,742 | 2,18,927 | 1,84,460 | 20,440 | 18,000 | 1,30,231 | 1,18,930 | 12,079 | 9,776 | 88,202 | 51,590 |
| Total B4 | 51,482 | 77,132 | 5,22,083 | 4,23,271 | 38,578 | 50,880 | 2,58,347 | 2,63,078 | 25,840 | 30,057 | 2,60,415 | 1,70,182 |
| B5: Engine Capacity >150 CC but less than equal to 200 CC | | | | | | | | | | | | |
| Bajaj Auto Ltd (Averger, Husqvarna, KTM Pulsar) | 46,697 | 47,480 | 2,40,075 | 2,85,212 | 36,902 | 28,702 | 1,27,216 | 1,62,801 | 12,437 | 18,438 | 1,10,199 | 1,29,682 |
| Hero MotoCorp Ltd (Xpulse 200, Xpulse) | 7,781 | 9,261 | 89,794 | 67,487 | 8,195 | 7,058 | 55,903 | 41,030 | 1,214 | 1,970 | 12,435 | 11,069 |
| Hero's Motorcycle & Scooter India Pvt Ltd (CB 20) | 59,556 | 31,901 | 1,82,142 | 1,94,245 | 34,907 | 28,878 | 1,38,857 | 1,65,142 | 5,132 | 2,820 | 44,787 | 22,812 |
| India Kawasaki Motors Pvt Ltd (W175) | - | - | - | 348 | - | 59 | - | 409 | - | - | - | - |
| India Yamaha Motor Pvt Ltd (MT 15, R15) | 19,500 | 24,527 | 1,33,900 | 1,37,738 | 18,678 | 21,700 | 1,21,235 | 1,29,245 | 1,084 | 1,482 | 10,239 | 8,843 |
| Suzuki Motorcycle India Pvt Ltd (Gixxer, Raider) | 6,102 | 11,212 | 81,348 | 74,799 | 954 | 1,953 | 9,895 | 14,613 | 10,060 | 9,269 | 53,594 | 59,755 |
| TVS Motor Company Ltd (Apache) | 49,797 | 35,217 | 2,70,968 | 2,72,367 | 40,988 | 38,187 | 1,89,807 | 2,15,469 | 7,682 | 8,384 | 73,440 | 49,987 |
| Total B5 | 1,71,423 | 1,59,088 | 9,58,217 | 10,26,193 | 1,40,465 | 1,29,537 | 6,52,314 | 7,31,832 | 37,903 | 42,183 | 3,04,764 | 2,82,245 |



| NIA#1 | | | | | | | | | | | | |
|---|-----------------|-----------------|--------------------------|------------------|-----------------|-----------------|--------------------------|-----------------|-----------------------------------|---------------|--------------------------|-----------------|
| Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of October 2023 and Cumulative for April-October 2023 | | | | | | | | | | | | |
| | | | | | | | | | Report IV (Number of Vehicles) | | | |
| Category Segment/Subsegment Manufacturer | Production | | | | Domestic Sales | | | | Exports | | | |
| | October 2022 | 2023 | April-October 2022-23 | 2023-24 | October 2022 | 2023 | April-October 2022-23 | 2023-24 | October 2022 | 2023 | April-October 2022-23 | 2023-24 |
| Passenger Vehicles (PVs) | | | | | | | | | | | | |
| A : Passenger Cars - Upto 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 (Comet LV) | NA | NA | 3,052 | NA | NA | NA | 1,914 | - | - | - | - | - |
| Total Micro | - | - | 3,052 | - | - | - | 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, Spresso) | 29,218 | 14,073 | 1,75,829 | 1,08,832 | 24,936 | 14,568 | 1,45,992 | 87,118 | 1,968 | 2,516 | 25,342 | 23,476 |
| Renault India Pvt Ltd (Kwid) | 2,699 | 170 | 19,275 | 7,943 | 1,894 | 869 | 13,074 | 6,489 | 450 | 28 | 5,889 | 3,850 |
| Total Mini | 31,117 | 14,243 | 1,95,104 | 1,16,781 | 26,830 | 15,437 | 1,59,066 | 93,607 | 2,418 | 2,544 | 30,911 | 27,126 |
| Compact : Seats upto-5, Length Normally between 3600 - 4000 mm, Body Style-Sedan/Estate/Hatch/Notchback, Engine Displacement Normally upto 1.4 Litre | | | | | | | | | | | | |
| Honda Cars India Ltd (Amaze, Jazz) | 5,347 | 3,238 | 30,740 | 24,873 | 5,640 | 2,890 | 30,210 | 22,540 | 118 | 83 | 688 | 897 |
| Hyundai Motor India Ltd (Aura, Grand i10, i20, Santro) | 25,067 | 25,980 | 1,02,700 | 1,05,351 | 20,317 | 17,600 | 1,24,154 | 1,15,382 | 4,297 | 7,580 | 39,450 | 51,618 |
| Maruti Suzuki India Ltd (OMI Model# Baleno, Ce | 68,919 | 91,783 | 6,12,843 | 6,12,474 | 73,685 | 81,862 | 5,07,113 | 4,99,591 | 4,988 | 10,580 | 85,118 | 88,204 |
| Tata Motors Ltd* (Altroz, Tigor, Tigor) | NA | NA | 94,072 | 1,05,830 | NA | NA | 90,065 | 1,05,943 | NA | NA | 90 | 828 |
| Toyota Kirloskar Motor Pvt Ltd (Glanza) | - | - | - | - | 3,787 | 4,724 | 19,953 | 31,584 | - | - | - | - |
| Volkswagen India Pvt Ltd (Polo) | - | - | 874 | - | - | - | 753 | - | - | - | 1,095 | - |
| Total Compact | 1,20,833 | 1,19,408 | 9,21,229 | 9,10,477 | 1,04,009 | 1,06,136 | 7,93,232 | 7,78,043 | 19,403 | 18,543 | 1,25,436 | 1,39,247 |
| Super Compact : Seats upto-5, Length Normally between 4000 - 4250 mm, Body Style-Sedan/Estate/Hatch/Notchback, Engine Displacement Normally upto 1.6 Litre | | | | | | | | | | | | |
| Maruti Suzuki India Ltd (Verito) | - | - | - | - | - | - | 186 | - | - | - | - | - |
| Total Super Compact | - | - | - | - | - | - | 186 | - | - | - | - | - |
| Mid-Size : Seats upto-5, Length Normally between 4250 - 4500 mm, Body Style-Sedan/Estate/Hatch/Notchback, Engine Displacement Normally upto 1.6 Litre | | | | | | | | | | | | |
| Honda Cars India Ltd (City) | 4,398 | 4,651 | 35,610 | 24,297 | 3,250 | 1,953 | 22,927 | 11,054 | 1,172 | 3,579 | 13,363 | 12,461 |
| Hyundai Motor India Ltd (Verna) | 4,780 | 5,362 | 33,800 | 57,383 | 2,179 | 2,313 | 11,409 | 22,048 | 2,694 | 3,963 | 22,375 | 29,284 |
| Maruti Suzuki India Ltd (Ciaz) | 2,923 | 1,334 | 15,365 | 15,676 | 1,584 | 895 | 8,810 | 5,136 | 1,713 | 530 | 6,063 | 5,690 |
| Nissan Motor India Pvt Ltd (Sunny) | 4,039 | 2,927 | 27,705 | 20,422 | - | - | - | - | 4,570 | 2,997 | 27,501 | 20,165 |
| Volkswagen India Pvt Ltd (Vento, Virtus) | 1,740 | 6,212 | 15,707 | 37,128 | 1,072 | 1,172 | 9,476 | 12,364 | 179 | 3,357 | 8,487 | 16,816 |
| Total Mid-Size | 17,183 | 20,486 | 1,28,190 | 1,43,446 | 8,385 | 6,333 | 52,222 | 53,600 | 11,224 | 14,083 | 78,399 | 84,296 |
| Executive : Seats upto-5, Length Normally between 4500 - 4700 mm, Body Style-Sedan/Estate/Notchback, Engine Displacement Normally upto 2 Litre | | | | | | | | | | | | |
| Skoda Auto India Pvt Ltd (Octavia, Slavia) | 1,277 | 1,688 | 14,039 | 12,290 | 1,500 | 1,943 | 14,884 | 11,755 | - | - | - | 12 |
| Total Executive | 1,277 | 1,688 | 14,939 | 12,290 | 1,500 | 1,943 | 14,884 | 11,755 | - | - | - | 12 |
| 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 (Superb) | 139 | - | 884 | - | 143 | - | 980 | 131 | - | - | - | - |
| Toyota Kirloskar Motor Pvt Ltd (Camry) | 73 | 226 | 876 | 1,310 | 59 | 197 | 575 | 1,217 | - | - | - | - |
| Total Premium | 212 | 226 | 1,660 | 1,310 | 202 | 197 | 1,555 | 1,348 | - | - | - | - |
| Total Passenger Cars | 1,70,622 | 1,56,250 | 12,61,022 | 11,87,356 | 1,40,926 | 1,30,046 | 10,20,946 | 9,40,267 | 33,045 | 35,167 | 2,34,745 | 2,50,681 |

* Only cumulative data is available for Apr-Sep NA=Not Available #Only production volume of OEM Model is reported by Maruti Suzuki India Limited

| NIA#1 | | | | | | | | | | | | |
|--|-----------------|---------------|--------------------------|-----------------|-----------------|---------------|--------------------------|-----------------|-----------------------------------|--------------|--------------------------|---------------|
| Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of October 2023 and Cumulative for April-October 2023 | | | | | | | | | | | | |
| | | | | | | | | | Report IV (Number of Vehicles) | | | |
| Category Segment/Subsegment Manufacturer | Production | | | | Domestic Sales | | | | Exports | | | |
| | October 2022 | 2023 | April-October 2022-23 | 2023-24 | October 2022 | 2023 | April-October 2022-23 | 2023-24 | October 2022 | 2023 | April-October 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 | | | | | | | | | | | | |
| Honda Cars India Ltd (WRV) | 639 | - | 4,440 | - | 633 | - | 3,959 | - | 88 | - | 375 | 286 |
| Hyundai Motor India Ltd (Exter, Venue) | 10,053 | 20,118 | 74,344 | 1,17,113 | 9,585 | 19,678 | 73,671 | 1,38,130 | 499 | 1,396 | 3,088 | 9,539 |
| Kia Motors India Pvt Ltd (Sonet) | 6,889 | 8,698 | 70,623 | 72,193 | 7,614 | 6,493 | 52,718 | 45,559 | 1,123 | 2,396 | 17,537 | 27,142 |
| Maruti Suzuki India Ltd (Omni, Nexon, Nexon EV, Seltos) | 17,318 | 20,659 | 1,10,474 | 1,41,451 | 18,720 | 20,744 | 1,13,011 | 1,39,770 | 610 | 45 | 3,511 | 3,155 |
| Maruti Suzuki India Ltd (OMI Model# Brezza, Innova) | 9,515 | 33,350 | 1,27,492 | 2,04,162 | 5,941 | 29,259 | 79,798 | 1,87,268 | 587 | 4,229 | 29,913 | 5,751 |
| Nissan Motor India Pvt Ltd (Magne) | 4,169 | 1,806 | 27,322 | 23,045 | 2,819 | 2,573 | 9,582 | 17,223 | 2,384 | 860 | 5,296 | 3,855 |
| PCA Motors Pvt Ltd (C3, F3) | 1,302 | 222 | 4,229 | 5,211 | 1,180 | 461 | 3,959 | 4,411 | - | 25 | - | 1,126 |
| Renault India Pvt Ltd (Kiger, Triber) | 7,471 | 1,007 | 51,719 | 23,508 | 5,824 | 2,992 | 35,388 | 22,579 | 220 | 1,518 | 9,543 | 6,538 |
| Tata Motors Ltd (Nexon Punch) | NA | NA | 1,52,757 | 1,53,851 | NA | NA | 1,52,249 | 1,51,811 | NA | NA | 823 | 480 |
| Toyota Kirloskar Motor Pvt Ltd (Urban Cruiser) | - | - | - | - | - | - | - | - | - | - | - | - |
| Total UV1 | 59,744 | 85,849 | 6,31,700 | 7,40,014 | 66,396 | 82,140 | 5,59,981 | 6,75,370 | 5,507 | 9,996 | 69,746 | 81,862 |
| UV1 : Length 4000 to 4400 mm & Price < 20 Lakhs | | | | | | | | | | | | |
| Force Motors Ltd (G, Kha) | 19 | 2 | 475 | 12 | 50 | - | 448 | - | - | - | 1 | 2 |
| Honda Cars India Ltd (Elevate) | - | 5,459 | - | 14,151 | - | 4,957 | - | 13,404 | - | 24 | - | 28 |
| Hyundai Motor India Ltd (Creta) | 13,569 | 13,234 | 1,02,809 | 98,877 | 11,880 | 13,677 | 87,362 | 86,770 | 1,587 | 705 | 15,475 | 7,713 |
| Kia Motors India Pvt Ltd (Seltos) | 12,852 | 14,040 | 68,230 | 68,033 | 9,777 | 12,362 | 59,617 | 58,217 | 3,040 | 227 | 27,981 | 10,327 |
| Maruti Suzuki India Ltd (OMI Model# Jolly, Grand Vitara) | 17,314 | 15,287 | 83,543 | 93,093 | 18,546 | 25,043 | 94,205 | 1,49,459 | 589 | 7,754 | 4,878 | 22,873 |
| MG Motor India Pvt Ltd (Astor) | 2,063 | 1,008 | 11,529 | 7,765 | 1,774 | 890 | 9,351 | 5,746 | - | - | - | - |
| Nissan Motor India Pvt Ltd (Kicks) | - | 1,242 | 242 | - | - | - | 1,062 | - | - | - | - | 16 |
| PCA Motors Pvt Ltd (C3 Aircross) | - | 348 | - | 1,463 | - | 224 | - | 627 | - | - | - | - |
| Skoda Auto India Pvt Ltd (Kushaq) | 1,603 | 3,188 | 14,458 | 15,812 | 1,651 | 2,447 | 15,057 | 15,490 | 54 | 23 | 295 | 922 |
| Toyota Kirloskar Motor Pvt Ltd (Nedra Manufacturer) | 10,590 | 15,111 | 18,395 | 1,17,893 | 3,324 | 4,779 | 4,517 | 26,191 | - | 1,537 | - | 9,589 |
| Volkswagen India Pvt Ltd (Taigun) | 3,810 | 3,625 | 15,388 | 20,036 | 2,355 | 2,219 | 12,030 | 12,109 | 1,501 | 894 | 2,435 | 7,441 |
| Total UV1 | 55,817 | 75,330 | 3,35,999 | 4,34,155 | 49,699 | 65,998 | 2,83,850 | 3,78,066 | 7,071 | 5,274 | 50,329 | 54,031 |
| UV2 : Length between 4400 - 4700 mm & Price < 20 Lakhs | | | | | | | | | | | | |
| Hyundai Motor India Ltd (Alcazar) | 3,667 | 2,664 | 21,904 | 19,973 | 2,847 | 1,837 | 17,057 | 13,349 | 519 | 766 | 4,810 | 6,066 |
| Kia Motors India Pvt Ltd (Carnos) | 6,203 | 5,645 | 44,992 | 45,439 | 5,479 | 5,255 | 43,509 | 40,587 | 542 | 733 | 4,151 | 5,134 |
| Maruti Suzuki India Ltd (Marazzo, Scorpio, Xuv600) | 12,826 | 22,590 | 60,950 | 1,21,814 | 13,466 | 22,864 | 79,825 | 1,19,833 | 114 | 511 | 707 | 3,910 |
| Maruti Suzuki India Ltd (XL6) | 2,452 | 4,679 | 23,740 | 27,422 | 2,484 | 4,367 | 23,827 | 26,472 | 20 | 301 | 65 | 677 |
| MG Motor India Pvt Ltd (Hector) | 1,728 | 2,713 | 13,754 | 18,962 | 1,630 | 2,703 | 13,723 | 17,591 | 12 | - | 12 | - |
| Tata Motors Ltd (Harrier, Sulisthi) | NA | NA | 30,150 | 21,865 | NA | NA | 29,232 | 20,520 | NA | NA | 6 | 1 |
| Total UV2 | 26,936 | 38,691 | 2,14,816 | 2,55,275 | 25,906 | 37,226 | 2,03,354 | 2,38,335 | 1,607 | 2,801 | 9,751 | 19,288 |
| UV3 : Length > 4700 mm & Price < 20 Lakhs | | | | | | | | | | | | |
| Force Motors Ltd (Trax) | - | 132 | (C) | (B) | - | 86 | - | 686 | - | - | - | 1 |
| Isuzu Motors India Pvt Ltd (Hi-Lander V-Cross) | 151 | - | 1,724 | 56 | 55 | 69 | 324 | 255 | 240 | - | 477 | - |
| Toyota Kirloskar Motor Pvt Ltd (Innova Crysta, Innova) | 2,857 | 5,407 | 39,448 | 66,073 | 3,736 | 6,163 | 39,640 | 68,597 | - | - | - | - |
| Total UV3 | 3,008 | 5,539 | 41,168 | 66,894 | 3,794 | 6,338 | 40,164 | 66,587 | 248 | - | 477 | 1 |

* Only cumulative data is available for Apr-Sep NA=Not Available #Only production volume of OEM Model is reported by Maruti Suzuki India Limited



Statistics

| SIAM | | | | | | | | | | | | |
|--|-----------------|-----------------|--------------------------|--------------------------|-----------------|-----------------|--------------------------|--------------------------|-----------------|-----------------|-------------------------------------|--------------------------|
| Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of October 2023 and Cumulative for April-October 2023 | | | | | | | | | | | | |
| | | | | | | | | | | | Report IV (No. noer of Vehicles) | |
| Category Segment/Subsegment Manufacturer | Production | | | | Domestic Sales | | | | Exports | | | |
| | October 2022 | October 2023 | April-October 2022-23 | April-October 2023-24 | October 2022 | October 2023 | April-October 2022-23 | April-October 2023-24 | October 2022 | October 2023 | April-October 2022-23 | April-October 2023-24 |
| UV4 : Price between Rs. 20 to 30 Lakh FCA Ind a Automabiea Pvt Ltd (Jeeo Compass) | 1,070 | 501 | 8,325 | 3,392 | 752 | 388 | 5,678 | 2,019 | 169 | 109 | 2,518 | 1,458 |
| Force Motors Ltd (Gurkha): | - | - | - | 2 | - | - | - | - | - | - | - | - |
| Hyundai Motor India Ltd (Kona, Tucson): | 564 | 5 | 2,343 | 2,883 | 593 | 246 | 2,133 | 2,529 | - | - | - | - |
| Kia Motors India Pvt Ltd (Carnival): | 300 | - | 2,388 | - | 301 | - | 2,075 | - | - | - | - | - |
| Mahindra & Mahindra Ltd (Aurus G4) | 5 | - | 438 | - | 40 | - | 44 | - | - | - | - | - |
| Maruti Suzuki India Ltd (Invicto) | - | - | - | - | - | 478 | - | 2417 | - | - | - | - |
| R/G Moto - India Pvt. Ltd (ZS EV) | 1,000 | NA | 2,067 | 1,671 | 754 | NA | 2,844 | 1,767 | - | - | - | - |
| PCA Motors Pvt. Ltd (CS Aircross): | 22 | 1 | 197 | 34 | 15 | 5 | 189 | 48 | - | - | - | - |
| Toyota Kirloskar Motor Pvt Ltd (Model Manufactu | - | 714 | - | 3,022 | - | - | - | - | - | - | - | - |
| Total UV4 | 2,961 | 1,221 | 16,360 | 11,204 | 2,465 | 1,127 | 13,360 | 8,760 | 169 | 109 | 2,518 | 1,458 |
| UV5 : Price >Rs. 30 Lakh FCA Ind a Automabiea Pvt Ltd (Jeeo Meridian) | 576 | 283 | 3,112 | 2,678 | 404 | 109 | 2,822 | 1,482 | 112 | 180 | 311 | 1,467 |
| Hyundai Motor India Ltd (for q5) | - | 122 | - | 342 | - | 117 | - | 907 | - | - | - | - |
| Isuzu Motors Ind a Pvt Ltd (MU-X) | 1 | - | 45 | 34 | 3 | - | 32 | 26 | - | - | - | - |
| Kia Motors India Pvt Ltd (EV6) | - | - | 15 | - | 152 | 14 | 168 | 927 | - | - | - | - |
| R/G Moto - India Pvt. Ltd (Gloster) | 160 | 250 | 1,240 | 2,057 | 179 | 247 | 1,212 | 1,700 | - | - | - | - |
| SkodaAuto India Pvt Ltd (Kociaq) | 62 | 205 | 633 | 2,525 | 55 | 176 | 659 | 1,258 | - | - | - | - |
| Toyota Kirloskar Moto Pvt Ltd (Fortuner,Hilux,La | 2,117 | 2,980 | 17,150 | 20,695 | 2,119 | 2,038 | 17,383 | 21,207 | - | - | 45 | 2 |
| Volkswagen Ind a Pvt Ltd (T Guan) | 75 | 216 | 713 | 1,380 | 82 | 58 | 723 | 804 | - | - | - | - |
| Total UV5 | 2,991 | 3,756 | 22,908 | 30,319 | 2,994 | 3,527 | 22,989 | 28,181 | 112 | 180 | 358 | 1,469 |
| Total Utility Vehicles (UVs) | 1,51,457 | 2,13,386 | 12,62,751 | 15,27,861 | 1,41,254 | 1,98,356 | 11,23,708 | 13,65,309 | 14,614 | 17,859 | 1,33,177 | 1,35,109 |
| Vans C : Vans : Generally 1 or 1.5 box; seats upto 5 to 10 | | | | | | | | | | | | |
| V1 :Hard tops mainly used for personal transport, Price upto Rs. 10 Lakh Mahindra & Mahindra Ltd (Maximo,Supro) | 1 | 35 | 1,643 | 211 | 61 | - | 1,457 | - | 1 | 28 | - | 175 |
| Maruti Suzuki India Ltd (Eeco) | 8,809 | 12,724 | 78,838 | 85,497 | 8,861 | 12,975 | 78,37 | 80,694 | - | 886 | 1,89 | 4,625 |
| Tata Motors Ltd* (Magic Express) | NA | NA | 2,323 | - | NA | NA | 3,283 | 5,148 | NA | NA | 36 | - |
| Total V1 | 8,910 | 12,769 | 83,404 | 85,704 | 8,922 | 12,975 | 83,111 | 85,842 | 1 | 894 | 224 | 4,800 |
| V2 :Soft tops mainly used as Maxi Cabs, Price upto Rs. 10 Lakh Mahindra & Mahindra Ltd (Sapro) | - | - | 153 | - | 11 | - | 100 | 10 | - | - | - | 64 |
| Tata Motors Ltd* (Magic Iris) | NA | NA | 60 | 75 | NA | NA | 62 | 905 | NA | NA | 20 | 64 |
| Total V2 | - | - | 213 | 75 | 11 | - | 162 | 819 | - | - | 20 | 84 |
| Total Vans | 8,910 | 12,769 | 83,817 | 85,779 | 8,933 | 12,975 | 83,263 | 86,761 | 1 | 894 | 244 | 4,884 |
| Total Passenger Vehicles (PVs) | 3,39,989 | 3,82,395 | 25,07,390 | 28,00,996 | 2,91,113 | 3,41,377 | 22,27,917 | 24,12,337 | 47,660 | 53,920 | 3,68,156 | 3,90,974 |

* Only available data is provided for SA-Sp

NA=Not Available

| SIAM | | | | | | | | | | | | |
|--|-----------------|-----------------|--------------------------|--------------------------|-----------------|-----------------|--------------------------|--------------------------|-----------------|-----------------|-------------------------------------|--------------------------|
| Sub-segment & Company wise Production, Domestic Sales & Exports Report for the month of October 2023 and Cumulative for April-October 2023 | | | | | | | | | | | | |
| | | | | | | | | | | | Report IV (No. noer of Vehicles) | |
| Category Segment/Subsegment Manufacturer | Production | | | | Domestic Sales | | | | Exports | | | |
| | October 2022 | October 2023 | April-October 2022-23 | April-October 2023-24 | October 2022 | October 2023 | April-October 2022-23 | April-October 2023-24 | October 2022 | October 2023 | April-October 2022-23 | April-October 2023-24 |
| Three Wheelers | | | | | | | | | | | | |
| A: Passenger Carriers | | | | | | | | | | | | |
| A1: Passenger Carrier A1: No. of seats including driver not exceeding 4 & Max.Mass not exceeding 1 tonne | | | | | | | | | | | | |
| Atu. Auto Ltd (Atul Gomini,Atul Rok,Atul Rok 1.3L) | 833 | 502 | 3,748 | 2,730 | 356 | 243 | 2,118 | 1,589 | 233 | 269 | 1,512 | 1,087 |
| Bajaj Auto Ltd (Maxima,RE) | 46,574 | 65,157 | 2,49,758 | 3,51,047 | 32,123 | 45,910 | 1,27,695 | 2,52,346 | 16,465 | 1,220 | 1,22,304 | 88,540 |
| Continental Engines Pvt Ltd (Baxy EV, P 30,Max | 89 | 126 | 1,253 | 710 | 5 | 95 | 1,254 | 650 | - | - | - | - |
| Mahindra & Mahindra Ltd (Alfa, Treo) | 2,071 | 4,500 | 1,035 | 22,862 | 1,879 | 4,440 | 10,837 | 22,140 | - | 45 | 45 | 108 |
| Piaggio Vehicles Pvt. Ltd (Ape Auto,Ape City): | 8,373 | 9,320 | 45,025 | 47,895 | 4,867 | 7,329 | 28,705 | 40,740 | 3,221 | 725 | 15,620 | 6,074 |
| TVS Motor Company Ltd (TVS King, AS) | 15,972 | 12,823 | 1,03,395 | 90,027 | 1,502 | 1,767 | 9,028 | 10,953 | 14,049 | 12,165 | 1,01,988 | 80,515 |
| Total A1 | 72,711 | 82,482 | 4,19,213 | 5,15,365 | 40,520 | 60,284 | 1,79,528 | 3,28,428 | 33,968 | 24,428 | 2,42,569 | 1,76,325 |
| A2:No. of seats including driver exceeding 4 but not exceeding 7 & Max.Mass not exceeding 1.5 tonnes | | | | | | | | | | | | |
| Atu. Auto Ltd (Atul Gom, Gomni,Pass) | 309 | 865 | 3,835 | 3,256 | 428 | 605 | 3,276 | 2,687 | - | 40 | 30 | 96 |
| Force Motors Ltd (Minilo) | 143 | 424 | 1,496 | 2,417 | - | - | - | - | 70 | 425 | 1,372 | 2,346 |
| Total A2 | 542 | 1,289 | 5,100 | 5,672 | 426 | 605 | 3,276 | 2,684 | 70 | 460 | 1,402 | 2,742 |
| Total Passenger Carriers | 73,253 | 83,781 | 4,24,313 | 5,21,037 | 41,246 | 60,889 | 1,82,804 | 3,31,109 | 34,038 | 24,888 | 2,43,971 | 1,79,067 |
| E-Rickshaw | | | | | | | | | | | | |
| Atu. Auto Ltd (Atul Elite) | 356 | 549 | 1,565 | 3,233 | 356 | 551 | 1,845 | 3,236 | - | - | - | - |
| Continental Engines Pvt Ltd (Baxy E-Rick) | 312 | 512 | 758 | 2,884 | 190 | 431 | 983 | 2,073 | - | - | - | - |
| Mahindra & Mahindra Ltd (e-Alfa Mini, Treo Yash) | 1,861 | 3,518 | 10,451 | 14,958 | 1,777 | 3,142 | 10,471 | 16,205 | - | - | - | - |
| Total E-Rickshaw | 2,529 | 4,579 | 12,784 | 21,075 | 2,323 | 4,124 | 12,749 | 22,114 | - | - | - | - |
| B: Goods Carrier | | | | | | | | | | | | |
| B1: Max mass not exceeding 1 tonnes | | | | | | | | | | | | |
| Atu. Auto Ltd (Atul Gom,Atul Gomini,Atul Samant) | 907 | 1,213 | 4,365 | 4,240 | 915 | 1,190 | 4,300 | 3,017 | 19 | 50 | 90 | 80 |
| Bajaj Auto Ltd (Maxima) | 4,196 | 5,197 | 21,058 | 30,214 | 4,552 | 5,141 | 20,488 | 29,107 | - | 392 | 224 | 880 |
| Continental Engines Pvt Ltd (Baxy Cargo,Baxy C) | 228 | 113 | 2,765 | 397 | 123 | 33 | 2,118 | 302 | - | - | - | - |
| Mahindra & Mahindra Ltd (Alfa, ren,As,Grand) | 1,097 | 1,742 | 8,355 | 9,435 | 1,217 | 1,670 | 8,224 | 9,275 | - | 3 | 21 | 21 |
| Piaggio Vehicles Pvt. Ltd (Ape Xtra) | 3,388 | 3,202 | 5,549 | 19,200 | 3,440 | 3,515 | 17,943 | 18,032 | 127 | 57 | 1,050 | 453 |
| TVS Motor Company Ltd (TVS King, Cargo) | 122 | 213 | 1,290 | 405 | 36 | 38 | 245 | 217 | 71 | 134 | 900 | 187 |
| Total Goods Carrier | 9,936 | 11,734 | 55,180 | 63,891 | 10,326 | 11,659 | 53,323 | 61,450 | 217 | 645 | 2,410 | 1,621 |
| E-Cart | | | | | | | | | | | | |
| Atu. Auto Ltd (Atul Elite Cargo) | 73 | 139 | 692 | 883 | 42 | 103 | 690 | 839 | - | - | - | - |
| Continental Engines Pvt Ltd (Baxy E-Cart) | - | 6 | 10 | 116 | 9 | 15 | 21 | 110 | - | - | - | - |
| Mahindra & Mahindra Ltd (e-Alfa Cargo, Treo Yash) | 250 | 147 | 1,222 | 726 | 205 | 150 | 1,175 | 1,003 | - | - | - | - |
| Total E-Cart | 293 | 286 | 1,932 | 1,705 | 256 | 268 | 1,886 | 1,957 | - | - | - | - |
| Total Three Wheelers | 66,111 | 1,10,380 | 4,95,209 | 6,07,708 | 54,154 | 76,940 | 2,60,768 | 4,18,630 | 34,256 | 25,534 | 2,45,381 | 1,80,688 |



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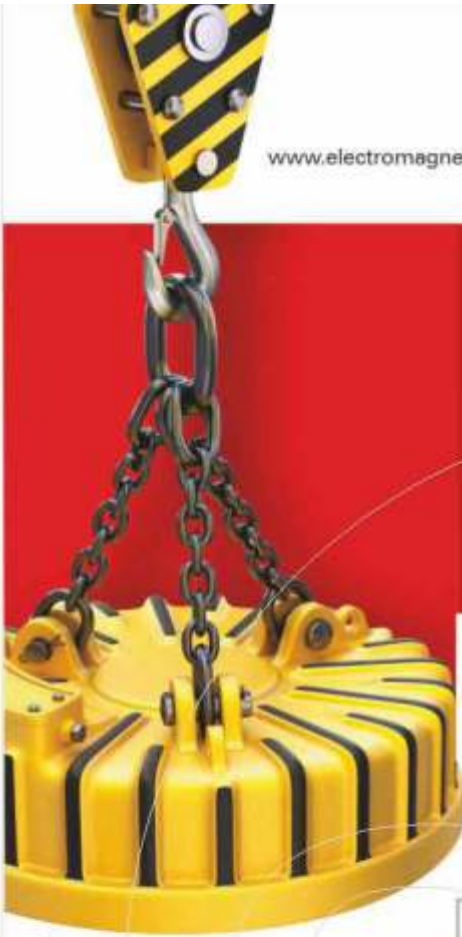
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