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Editor

Dear Readers,

iddle East & North Africa (MENA), the fastest growing region as far as infrastructure development is concerned, is a very prominent region for iron & steel industry as well. It imports huge quantities of finished steel from the global sources and furthermore, the steel industry in this region is on the upswing and is trying to support its evergrowing needs for infrastructure development process. The major trade partners of this region are China, Turkey, CIS countries etc. Though the logistics between this region and India is quite friendly, India is not able to push huge steel guantities there. Matching international prices and deliveries is always a challenge. On the geopolitical scene, all is not well in the Middle East. As we know, the Ukraine - Russia war is going on for more than two years and still there are no signs of ending it. Even though the war is being fought between only two countries, many other countries including the global big powers are indirectly involved in it. It has not only affected the steel exports from Ukraine and Russia into the middle east, but also the sea routes around those countries and the international trade. Further, the Israel - Hamas fight

## **Editorial Desk**



which erupted in October 2023, also has many dimensions. Many Middle East countries have been openly involved in the fight and this has directly impacted the infrastructure development process in the region. Considering the importance of MENA region, for the last few years, 'Steelworld' is publishing and distributing a special issue devoted to the industry in MENA region and it is very well received by the industry. Also it is invited to most of the metallurgical trade shows in the region as Media Partner. This ensures its continued connect with the iron & steel sector in the region. I am happy to share that in a recent survey conducted by the organisers of 'SteelFab Expo, (biggest steel expo in the MENA region) 'Steelworld' emerged as the most popular trade magazine. I feel this is the result and the reward for our adoption of digital platform which substantially enhanced 'Steelworld's industry penetration in the region and it's sustained presence in the region.

Today, the situation in the Middle East is quite fluid and it has naturally affected the iron & steel industry in the region. We can only hope that the geopolitical situation surrounding MENA region improves and the infrastructure development process in the region continues smoothly. Also, we should look forward to more trade between India and the MENA region, which will bring these regional economies closer. Apart from supplying finished steel, India can supply steel plant equipment, technology, technically gualified manpower, top management personnel etc., not to forget the training and research facilities !

Write your comments : https://steelworldblog.wordpress.com/

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STEELWORLD 04 Jan 2024



# **SUSTAINABLE STEEL** FOR GREENER BUILDINGS فولاذ مستدام لمبان خضراء











#### Face to Face



## Middle East is forging ahead with medium sized steel projects

**Rajesh Singh** Managing Director, R. Singh & Associates (P) Ltd.

Rajesh Singh is a B.Sc. graduate with 35 years of experience in the steel industry. He is the Managing Director of R Singh & Associates (P) Ltd, Delhi, India who are consulting engineers to the steel industry. The company does concept planning, feasibility studies, basic engineering & detailed engineering and project management in the area of steel melt shops and rolling mills. His functions in the company cover concept planning, strategy, feasibility studies and marketing. The company has offices in Delhi / Kolkata / Dubai.

R. Singh & Associates (P) Ltd. (RSA), a leading consultancy and engineering company for iron and steel projects, has been in business since 1968. For more than 50 years, the company has successfully engineered over 240 projects. In this interview with Santosh Mahanti, Editor of Iron & Steel Review magazine, Rajesh Singh, Managing Director of R. Singh & Associates (P) Ltd. talks about the company's strengths, technologies and major projects, among others. He discusses at length about how Indian companies are rapidly adopting highspeed mills. We also come to know from him about RSA's take towards green steelmaking.

D A Chandekar, Editor & CEO of Steelworld had an exclusive interaction with Mr. Rajesh Singh to understand more about the technologies introduced to the Indian steel industry, how is 'Make in India' helping Indian engineering companies, is the Middle East market growing slowly, etc. R. Singh & Associates has been one of the pioneers in steel plant engineering and consultancy services. Could you let us know how many projects you have commissioned so far?

We are a 50-year-old company and have engineered over 240 projects so far. In the last about 15 years, we have completed about 65 major projects covering beneficiation plants, pellet plants, steel melt shops, hot rolling mills and cold rolling mills.



MISCO, Dman-1.2 mit Steel Melt Shop for Billets and 1.1 mi Reban

## What are your recent and current major projects?

Half of our projects are international. We are in GCC, the MENA region, Africa, and Bangladesh. Most of these



## Casting Rounds, With All-Round Excellence!

Concast (India) commissioned a 6M, 2 Strand CCM producing Round sections at ASR Multimetals Pvt. Ltd., Gujarat.



This also stands as a combi-caster producing billets as well as rounds, ensuring precision and efficiency in operations. Highlighting a specially designed hydraulic system, this CCM marks another milestone in steel manufacturing, promising superior quality and enhanced productivity



Round Section Cast: 160mm dia & 180mm dia Billet Section Cast: 100mm sq & 125mm sq

As Concast (India) continues to drive technological advancements in the industry, its contributions to the steel sector remain pivotal, setting benchmarks for excellence and innovation.



#### Face to Face

projects are with reputed suppliers or European suppliers. In India, we are currently working on or have completed projects with JSW, JSPL, Tata, Rungta, Shyam Sel, Shyam Steel, Super Smelters and others.

We are currently engineering 14 nos. bar mills (some with wire rod lines), 3 hot strip mills, 1 plate mill, 2 nos. cold mill and processing lines, 2 nos. medium/heavy section millsand 2 nos. BF-based integrated steel plants. The capacities of these projects range from 0.3 Million Tonnes to 1.6 Million Tonnes. software in about 35% of our projects.

Which direction is the Indian steel industry taking in terms of creating new capacities and applying new technologies?

As you know, the big players, namely Jindal Groups, Tata and AMT, are setting up 5 Million Tonnes of projects and expanding companies that they have just taken over. The midsized players are now transitioning to 1.0 million plus tonne integrated plants. These could be called miniintegrated steel plants with the BF route. By 2028, there would be about 7 nos. 1.0



JSW STEELS LTD., INDIA - 1.2 MTPA WIRE ROD MILL

#### What are your strengths? Our strengths are:

(a) strategy, where we consult with and advise clients on the product mix and technologies they could plan.

(b) Our feasibilities are of high quality in content and presentation. We just completed a DPR for Tata's mini mill project.

(c) In project engineering, we are now working with 3D

MT such plants in iron operation, most of them with flat facilities. The smaller players are going up to 0.2 to 0.3 Million Tonnes of plants. These are micro-integrated steel plants based on the DRI route.

#### What are the new technologies that you are being introduced to the Indian steel industry?

The induction of new technologies are decisions

taken by the client in consultation with us and the technology providers. We are proactive in this area and advise clients on applicable and suitable technologies for their projects.

"Make in India" has been the slogan of the Amrit Kaal.



MISOD, Oman - 1.2 mit Steel Melt Shop for Billets and 1.1 mt Rebars

#### How much "Make in India" is helping our Indian engineering companies to execute and commission new projects?

Well, "Make in India" is a rather slow process, and progress on this front exists, but it could have been faster. Indian companies are slow to procure or create new technologies. International companies are starting subsidiaries to manufacture and source equipment and components from India to become more competitive. Indian companies, for eg, have started manufacturing medium-high-speed mills up to 35 mps.

Could you tell us something about the high-speed bar mills and wire rod mills? How successful are these projects in India?

In India, most of the bar mills we are engineering are high-speed mills from 30 mps to 50 mps. All the latest mills of Rungta are being GST NO.-22AADCS2665R1ZX

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#### Face to Face

implemented with highspeed delivery technologies. The reason is that with DRI as the metallic input into induction furnaces, slitting does not become an option. High-speed mills have other advantages too, except that the power consumption per tonne is higher.

With regard to wire rod mills, the maximum speed from European suppliers is 120 mps design speed with an achievable speed of 105 mps. Indian suppliers can offer achievable speeds of 75 mps.

#### We have adequate lightmedium section mills in India but hardly any medium-heavy section mills. What is your view on this?

The light-medium section mills are easier to set up because of the lower capex. For medium-heavy section mills, the capacity and capex tend to be higher. There are only 2 nos. high capacity heavy section mills: JSPL and Bhilai Steel plant. Most of the other heavy section mills are with Indian technology and low capacity with induction furnace blooms. There is now a requirement for heavy sections for bigger projects and infra projects, which is steadily growing, and the market is feeling the gap. Two companies have already taken steps for heavy section mills in India, one with medium capacity and one with high capacity. This should minimize the



demand-supply gap in the segment.

#### How do you see the Middle East market, which is slowly growing? What is your view on this?

The Middle East is a large region. So, Saudi Arabia is forging ahead with smaller steel projects, say up to 0.3/0.5 Million Tonne projects. High demand is expected in Saudi if things go well with their Neom and other projects. However, the pace of growth is slow, and infrastructure specially with respect to power is poor. There is some growth in UAE and Algeria. There are 2 big flat green steel projects already announced in Oman by Jindal Shadeed and in Saudi by Essar. Work is going on but since these are large projects, it is expected to take time to take off and commission.

#### Currently, we are producing 120 MT and planning to achieve 300 MT. What is your assessment on this?

To begin with, we think that the production is around 140-150 Million Tonnes. A lot of induction furnace-based production is either not reported or taken into account by the few agencies that work on demand and supply in our country, and that also in a limited way. With regard to growth, we have estimated, based on projects under construction and being planned, that about 40 to 50 Million Tonnes will be added by 2028, which is about 8 to 10 Million Tonnes per year. Infrastructure continues to be a challenge, especially with iron ore, coal and water.

#### Green steelmaking has been the thrust area. Are you also planning to provide technology in this direction?

As of now, green steel really does not apply to India. It is another 50 years before we become carbon neutral. For domestic consumption, being low carbon is applicable. Tata and JSW are just beginning their journey on this by setting up scrap-based steel plants, which generate less than onetenth of the  $CO_2$  that a BF-



Jindal Shadood, Sishar, Oman - 1 A mit Bar Mit

based integrated steel plant generates. Plus, they are also making their existing plants as efficient as possible, which indirectly reduces CO<sub>2</sub> generation. Carbon capture technologies are available, but the usage of CO2 is limited, and therefore to evacuate the captured carbon becomes a challenge. Hydrogen generation technologies are under consideration by the big players, but they find it unviable as of now.



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**Industry Update** 

## Atul Bhatt Urges Zero Accidents on 53rd Safety Day



Shri DCS Varma, Director of Factories, Govt of AP and Shri Atul Bhatt CMD RINL & Directors administered safety pledge to all that they renew their Pledgeto dedicate themselves for the cause of safety and health of all employees and to adhere to all safety rules so as not to endanger human life and to protect the plant, equipment and machinery from all damages.

Addressing the gathering, Sri Atul Bhatt, CMD, RINL said that technology adoption for the purpose of health & safety is gaining prominence. "RINL is using technology for capturing data analytics & extensive training. RINL has also planned to use drones for inspection of high rise structures, roofs etc. with enhanced production levels and Safety and wellbeing of employees is the topmost priority of RINL management", Sri Atul Bhatt added.

Sri Atul Bhatt, CMD, RINL thanked Sri DCS Varma, Director of Factories and the Factories department for their constant support and advise on taking corrective and preventive actions and in appraising RINL regarding latest legal and other requirements which are playing a crucial role in maintaining the sustainability of our plant.

Speaking on the occasion, the quest of honour Sri DCS Varma, Director of Factories, Govt. of AP, said that right communication plays a vital role in ensuring safety and called upon everyone to integrate safety in every aspect of life. Describing safety as the gateway to sustainability, Sri DCS Varma said "In safety, do what is right but not what is easy". The theme of the National Safety Day celebrations 2024 is "Focus on Safety leadership for Environmental, Social and Governance (ESG) As part of the National safety celebrations 2024, safety engineering department of RINL conducted special safety awareness activities and competitions on various aspects connected with Road safety, safety to the school children, house wives , Contract workers and employees and other important aspects of safety. A large number of employees actively took part in making the short films to highlight various aspects of safety. Prizes were presented by Sri DCS Varma and other dignitaries to departments which excelled in Safety performance and housekeeping and winners of various competitions. The dignitaries also

presented prizes to Coke Oven & Coal Chemical plant (CO&CCP),Raw material handling plant (RMHP), Civil & Structural Engg (C & St.ED) and Water Management departments (WMD) of RINL for "achieving 2 Million accident free man hours during the 2023 calendar year".

Sri Pravin Kumar, CGM (Services) RINL in his welcome address highlighted the importance of National Safety Day.

Earlier in the morning, Shri AK Sobti, Chief General Manager(Works)-Incharge hoisted the Safety Flag at ED (Works) building of RINL and said that promoting health and safety of all employees is of utmost importance for RINL management.

Shri DK Mohanty, Director (Commercial), Shri AK Bagchi, Director (Projects) and Addl. Charge Director (Operations), Shri S C Pandey, Director (Personnel) and Addl. Charge Director (Finance), Sri J. Siva Shankar Reddy, Jt. Chief Inspector of Factories, Sri V. Suresh, Deputy Chief Inspector of Factories, Sri P. Chinna rao, Inspector of Factories, Govt. of AP, Sri AK Sobti, CGM(Works)incharge, Chief General Managers, Heads of the Departments, Senior Executives, Members from Steel Executives' Association, Trade Unions, SC & ST Association, OBC Association, WIPS, School Children and teachers actively participated in the National Safety Day celebrations.

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Analysis





## Digitalization – Driving the Industry Ahead

The Asian Metallurgy Show, originally a physical exhibition since 1997, transitioned to a digital platform in 2021 due to Covid. The virtual Steel n Metal Expo held from 18<sup>th</sup> to 31<sup>st</sup> December, 2023, featured online stands and webinars covering topics like digitalization, commodity trading, green steel production, role of zinc, sustainability. A notable webinar titled 'Digitalization - Driving the Industry Ahead'

Metalworld & Steelworld. **Abhimanyu Raja-**Implementing automation requires buy-in from middle



Abhimanyu Raja, MD, Janyu Tech



The expert panel featured Mike Hedderman, Area Sales Manager, EMG Automation GmbH , Abhimanyu Raja, MD, Janyu Tech and Dr.Narra Rajesh, Director- Technical, Ulti-Met. This webinar was hosted by D.A. Chandekar, Editor, management and convincing top management of the need for investment despite safety not providing immediate returns. Retrofitting aged equipment, like hot metal handling systems in decades-old plants, is crucial. Collaboration with innovative companies, like in Dako, is key for joint product development. However, costs and integration challenges must be carefully assessed. Ultimately, successful implementation hinges on fostering an attitude of adoption, securing funding, and integrating changes seamlessly into existing operations.

#### Dr. Narra Rajesh -

Automation implementation requires a top-down approach, with visualization and approval



**Dr. Narra Rajesh**, Director- Technical, Ulti-Met

starting from upper management. There may be lingering concerns about job security, but embracing technology is essential for progress. As costs rise and industries evolve, integrating new technologies alongside traditional methods becomes increasingly necessary. Customers seeking justification for these changes are indeed justified,



![](_page_15_Picture_0.jpeg)

## Analysis

considering the broader context of industry advancements.

**Mike Hedderman**-Upper management must be convinced of the benefits of digitalization, primarily focusing on the potential for

![](_page_15_Picture_4.jpeg)

Mike Hedderman, Area Sales Manager, EMG Automation GmbH

increased profits and cost savings. However, other advantages such as improved communication, enhanced safety, and efficiency should also be highlighted. Recent advancements have enabled remote access to systems, allowing for better service and reduced downtime, especially crucial during the pandemic. Demonstrating these advantages will encourage further adoption of digitalization in industry.

#### Abhimanyu Raja -

Shifting to digital processes typically takes 40 to 60 months due to several factors. Firstly, digitalization ensures future readiness and meets customer demands, even if not initially preferred. Secondly, not all benefits are immediately tangible, and some decisionmakers still favor traditional methods. Educating and training employees on digital technologies further extends the implementation timeline. Despite ongoing developments, there remains a need for greater understanding and acceptance of digitalization at all levels of management.

Dr. Narra Rajesh - Over the years, there has been a notable shift in mindset, especially evident from observations made since 2020. Trends show significant changes globally, with what was once considered a luxury becoming a necessity, particularly highlighted during the COVID-19 pandemic. Looking ahead to 2023, further advancements are expected in various domains, indicating ongoing development. Notably, India's economy exemplifies rapid growth, with the time taken to reach each trillion-dollar milestone significantly decreasing.

**Mike Hedderman -** To stay competitive, it's crucial to continuously adopt and implement the latest technologies available. Industries are now reaching out to implement systems on their own, indicating a growing demand for innovation. Customers are increasingly seeking detailed information about their purchases, particularly in sectors like automotive, necessitating digital storage and accessibility of production data to meet these demands.

**D.A.Chandekar -** In countries like India with large populations, there's concern that excessive digitalization could lead to increased unemployment. As digitalization professionals, how do we address this argument?

Abhimanyu Raja- During the transition to computerization in banks, there was resistance from unions, mainly concerning fears of job loss and information security. However, these concerns were proven unfounded as technology adoption actually created more

![](_page_15_Picture_15.jpeg)

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![](_page_16_Picture_0.jpeg)

After successful operation of the first supply for 6 years, Isdemir continues its trust on EASTERN, by choosing EASTERN again for replacing all the other recuperators with high efficiency EASTERN Recuperators, at their 2 nos. 400 TPH Furnaces in the HSM.

![](_page_16_Picture_2.jpeg)

![](_page_17_Picture_0.jpeg)

## Analysis

opportunities and streamlined processes. Resistance to new technology is common, but embracing digitalization is essential for staying relevant in the future. Just as cell relevant and capture market share, businesses must embrace new technologies and evolve accordingly. Failure to do so could result in falling behind and losing out on opportunities.

![](_page_17_Picture_4.jpeg)

phones have become indispensable, digitalization is now a necessity for businesses to thrive.

**Dr. Narra Rajesh-** From a global perspective, it's evident that technology adoption is essential for staying competitive. With advancements like drones Mike Hedderman -

Resistance to new technology, particularly from unions and the workforce, is prevalent across various industries, including steel and rail. However, with the inevitability of technological advancement, adaptation is not a choice but a necessity for future-proofing systems.

![](_page_17_Picture_9.jpeg)

and digital warfare, countries are increasingly focusing on technological superiority. To remain Despite reluctance and battles with the workforce, the implementation of technologies like big data and robotics is increasing for efficiency and safety improvements. While some acceptance is reluctant, the trend towards digitalization is unmistakable and impacting everyday items as well as industrial processes.

Dr. Narra Rajesh- In our industry, there's little resistance to digitalization, especially at the top management level. In India, technology adoption has been rapid, often outpacing Western counterparts. Systems like UPI have been highly successful, driving the need for new skill sets and facilitating data analytics for product servicing. Overall, there's a widespread acceptance and enthusiasm for embracing digital advancements.

Dr. Narra Rajesh - Our experience with deploying a sledge cleaning robot underwater has been highly positive, eliminating the need for costly plant shutdowns and water pumping. Initially met with skepticism, concerns about expense have now vanished due to the robot's effectiveness and judicial interventions enforcing safety measures. With advancements like drones for inspections, the benefits of digitalization in hazardous environments are clear, prompting widespread adoption.

D.A.Chandekar- Okay, so I think let's close on this note that everybody is quite positive about the future of digitalization in India in general, and still in the same particular So the, the fact that our, our digital shows are also growing in also shows the interest and the seriousness of people in the process of digitalization.

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![](_page_18_Figure_1.jpeg)

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· Economical operation · Easy maintenance

![](_page_18_Picture_5.jpeg)

Analysis

## Tata Steel pays homage to its Founder on the 185<sup>th</sup> Birth Anniversary

~The theme of this year's Founder's Day is "Technology for people & planet"~

![](_page_19_Picture_3.jpeg)

Tata Steel today paid homage to its Founder Jamsetji Nusserwanji Tata, also regarded as the legendary 'Father of Indian Industry' on his 185<sup>th</sup> Birth Anniversary. Celebrated as Founder's Day, the flagship event happens every year at Jamshedpur on March 3 to pay tributes to the founder's vision of an industrial future with community welfare at its core. The theme of this year's celebrations is "Technology for people & planet". The event in Jamshedpur today was graced by N Chandrasekaran, Chairman, Tata Sons and T V Narendran, CEO & Managing Director, Tata Steel. Other senior

company officials, as well as Union members, were also present during the occasion. The event started with paying homage to the Founder at the Works Main Gate by the Chairman, CEO & MD, Union officials, Group company officials, company employees and citizens of Jamshedpur.

In his address to the citizens of Jamshedpur at Bistupur Postal Park, Chandrasekaran said, "Our founder, Jamsetji Tata. envisioned a future where the industry would be a force for positive change, and it is with great pride that we continue to uphold his legacy. On this occasion, we reaffirm our commitment to the principles of integrity, innovation, and social responsibility that have guided us since our inception. We will continue to work together with the community to build a brighter, more prosperous future for Jamshedpur and its

![](_page_19_Picture_8.jpeg)

![](_page_20_Picture_0.jpeg)

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![](_page_20_Picture_2.jpeg)

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![](_page_21_Picture_0.jpeg)

#### **Analysis**

#### residents."

After homage at the postal park, the Chairman met the Union officials at the Tata Workers' Union. Furthermore, the exhibition at Steelennium Hall inside Jamshedpur Works was inaugurated by him. Various departments presented their technology-led initiatives aligned with the theme.

On March 2 evening, the Chairman inaugurated the illumination at the Founder's Statue in Jubilee Park. Besides, various projects were inaugurated by CEO & MD T V Narendran which included a Geological Centre named after pioneering geologist P N Bose, i-MEC (Integrated Maintenance Excellence Centre) and i-**CPROC** (Integrated Coke Plant Remote Operations Centre) at Tata Steel Jamshedpur Works. The 14th Technical Exhibition, TechEx-2024, was also inaugurated by Narendran at the Shavak Nanavati Technical Institute (SNTI) on March 2.

i-MEC and i-CPROC are two new chapters added to the existing iROC (Integrated Remote Operation Centre) consisting of an integrated remote agglomerates centre and an integrated remote mining supervision centre. i-MEC is the centralized command centre for datadriven maintenance decision-making across various locations. It will enable Expert Advisory to Shop floor for Plant Maintenance, Easy deployment of a model in a

![](_page_21_Picture_6.jpeg)

![](_page_21_Picture_7.jpeg)

central data lake, and Standardized Maintenance Process resulting in synergistic asset Management & increased asset lifespan.

The Founder's Day celebrations were also organised at other locations and offices of Tata Steel across the country including Kalinganagar, Meramandali and Raw Materials locations in Jharkhand and Odisha. Tata Steel Sports Division organised various sporting activities on March 2 and 3 at JRD Tata Sports Complex in Jamshedpur.

TATA STEEL

![](_page_22_Picture_0.jpeg)

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![](_page_23_Picture_1.jpeg)

## GCC's Steel Industry : A Decade long Growth Story

One of the key factors driving the success of the GCC steel industry is its access to low-cost energy. With abundant natural gas reserves and government subsidies, energy-intensive industries like steel production enjoy significant cost advantages compared to global counterparts. This abundance of affordable energy not only reduces operational expenses but also enhances the industry's attractiveness for investors seeking sustainable longterm returns. Hence over the years a number of investments have been made in the regional steel industry. Over the last ten years the GCC Steel markets have matured as regional production has in many cases caught up with demand and in some cases caused overcapacity. We can separate the market scenario by country.

Saudi Arabia, the region's largest consumer and producer has added substantial import protections in the last few years. Local producers are insulated from international and even other regional producers to a large degree and hence dominate the domestic market. Despite the announcement of large projects such as NEOM, the domestic consumption has been stable for the last few years and for 2024 is

![](_page_23_Picture_6.jpeg)

Sundeep Rao Industry Expert

projected to grow only marginally. There are several new projects that seek to take advantage of the domestic market despite substantial existing rolling mill overcapacity. Some projects that seek to fill products that are still imported will be more successful and increase the domestic base.

The UAE market is probably the region's healthiest market in terms of growth. The growing population of the UAE leads to demand for new housing projects. Private and Semi private developers are taking advantage of the demand to launch a substantial number of new projects. Some older projects such as the Palm Jebel Ali

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## **View Point**

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have been relaunched as the market demand now supports such high-end projects. The UAE has overcapacity in the rebar sector. Local producers are now seeking to broaden their portfolio by introducing flat product lines and section lines. Specifically, Emirates Steel is still in talks to launch a new flat products plant and Jazeera Steel (Oman) is in the process of putting up a new section mill in Abu Dhabi to fill gaps in the market.

Oman is slowly turning into a strong player in the steel market as the Naveen Jindal Group is in the process of adding substantial new capacity in their new project in Duqm. Their plan envisages substantial new DRI capacity and a large flat products manufacturing setup. Jindal Shadeed has also acquired Sohar Steel from the former owners and is in the process of setting up a new wire rod line that should be capable of producing a variety of highquality wire rod products. The other GCC markets

Qatar, Kuwait and Bahrain have been more subdued in their activities. Demand remains stable in the markets and local and regional producers are easily able to fulfill demand. New projects are unlikely as demand growth is not expected.

The recent international conflicts have had a positive effect on the GCC economies, with the UAE benefiting the most. Any regional conflict and especially the Russia – Ukraine situation usually has a positive effect on oil prices. As the one of the main regional revenues is from the oil industry, increased oil

prices lead to larger government budgets and hence infrastructure spending that has a positive effect on steel consumption. The UAE. and Dubai have become somewhat safe havens for individuals who are wealthy and with to flee from conflicts. With an increase in the number of such wealthy residents, properties both for using as a home or for investment purposes see a rise in demand that developers are all eager to fulfill.

While the GCC steel market primarily caters to local construction and infrastructure sectors, future growth prospects extend beyond domestic borders. The region's strategic location at the crossroads of Europe, Asia, and Africa positions it as a potential export hub for steel products. GCC steel producers are eyeing opportunities to tap into lucrative markets such as Europe, leveraging their cost advantage and the lack of trade barriers that exist for other producers.

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![](_page_27_Picture_0.jpeg)

Mr. Rakesh Adlakha at the award ceremony hosted by World Manufacturing Congress in Mumbai

## SMS (a) group SMS Group Wins 'Most Sustainable & Innovative Manufacturing' Award

SMS India Private Limited, a subsidiary of the SMS group, has been recognized at the prestigious World Manufacturing Congress & Awards, with the title of 'Most Sustainable & Innovative Manufacturing Practices'. The event, which celebrates manufacturing excellence and innovation, was held on February 15, 2024, at Taj Lands End, Mumbai. This is the second consecutive award in a row conferred to SMS India by the Manufacturing Congress.

In a significant acknowledgment of its dedication to sustainable and innovative manufacturing practices, SMS India Private Limited was lauded for its commitment to setting industry benchmarks. Mr. Rakesh Adlakha, Senior Vice President & Head – Supply Chain Management, Global Functional Head – Production of SMS India Private Limited, accepted the award, which commends the visionary leaders and enterprises that have been pivotal in shaping the future of manufacturing. Under Adlakha's leadership, SMS India has also been a driving force in his recognition as 'The Top Most Leader in Manufacturing.'

As India strides towards becoming a global manufacturing hub, supported by the robust 'Make in India' initiative, SMS India stands at the forefront of this transformation. The manufacturing sector is projected to skyrocket, with the Indian Government targeting a manufacturing output contribution of 25% of the GDP by 2025. This goal aligns with SMS group's vision of efficiency and sustainability in manufacturing, particularly in the context of a carbon-neutral future.

The World Manufacturing Congress & Awards is a highprofile international assembly designed to unite manufacturers, operators, and stakeholders from a myriad of sectors, including steel, which is central to SMS group's expertise. The Congress provides an invaluable platform for discussions on the industry's most pressing issues and emerging trends such as the integration of machine learning, IoT advancements, and business transformation strategies.

SMS group is honored to receive these recognitions, which serve as a testament to its enduring commitment to innovation, quality, and sustainability in the steel industry and manufacturing at large.

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## Steel Demand Scenario in the MENA Region

The demand for steel in the MENA region in 2023 will grow by 0.6% in annual terms – up to 70.2 million tons. This assessment was given by the World Steel Association (WSA) in its short-term forecast, reports Metal Expert. The impact of global factors will have a more serious impact on demand in North Africa. The economies of the GCC (Gulf Cooperation Council) countries have proven to be more resilient to global shocks. Demand for steel in the Middle East is forecast to grow by 2.2% and by 3.2% in 2023 and 2024, reaching

52.4 million tons and 54.1 million tons, respectively. The impact of global factors will have a greater impact on the demand for steel in North African countries, especially Egypt and Algeria. In particular, the Egyptian economy is under the pressure of budget cuts, the consequences of the pandemic, the war in Ukraine and the lack of foreign currency. It is expected that by the end of the current year, the country's GDP will fall to 3% and Egypt will face high inflation.

The Steel Committee of the Organization for Economic Co-operation and

![](_page_29_Picture_5.jpeg)

Dhiraj K. Chauhan Director: METCON-Metallurgical Consultants

Development (OECD) predicted that the global demand for steel in 2023 will grow by only 1%. In 2022, it decreased by 2.3%. The OECD also expressed concern about the further increase in excess steelmaking capacity. (Ref: Reports of Halina Yermolenko in Metal Expert.)

MENA's steel sector has a major advantage as it is already based on DRI using gas rather than coal. The region has an established, growing source of DR-grade iron ore – a commodity in limited supply that makes up just 3%-4% of total global iron ore trade. Vale, the world's

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#### **View Point**

largest producer of DRgrade iron ore, is planning green iron "Mega Hubs" in the Middle East that will supply iron ore pellets to coexports are replaced by exports of green iron as HBI from locations where cheap green hydrogen can be produced. In October 2023, The focus of future MENA iron and steel projects should be on early adoption of locally produced green hydrogen.

![](_page_31_Picture_5.jpeg)

located DRI plants to produce hot briquetted iron (HBI) for local consumption and export.

Gas-based steelmaking via DRI has lower emissions than the coal-consuming blast furnaces that dominate steelmaking in most other regions, but it can only be made truly 'green' by switching to green hydrogen as its cost falls over the rest of this decade. MENA's excellent solar resources will allow the region to produce cheap green hydrogen in the near future. Planned green hydrogen production in the region has expanded substantially.

Vale, Rio Tinto – the world's largest iron ore producer – envisages a future where iron ore ING's global steel lead and head of metals, mining and fertilizers stated: "I expect significant iron production to move to places like Northern Europe, Southern Europe and the Middle East and North Africa regions. Steelmakers in South Korea and Japan are already considering the import of HBI from places such as the Middle East, planning projects that would initially use gas before switching to green hydrogen as it gets cheaper. To cut emissions in the interim, some of these projects are considering carbon capture utilization & storage (CCUS). Steel companies in Europe, Korea and Japan will have to make difficult strategic choices about where to produce iron going forward."

Middle East is home to the world's only industrial-scale steel CCUS project, at Emirates Steel Arkan's Al Reyadah project in the UAE. However, this does not fully decarbonise the operation - only 30% of carbon dioxide was captured in 2022. The captured carbon is used for enhanced oil recovery (EOR) thereby enabling the release of more carbon emissions. Despite MENA's numerous advantages when it comes to developing a truly green steel sector, it faces growing competition from other countries. Its primary competition in the emerging green iron/HBI trade comes from iron ore mining nations -Australia, Brazil and Canada which all have access to strong renewable and/or hydro power resources.

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#### **View Point**

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A truly low-carbon local steel industry would give MENA further advantage over other regions as Europe's carbon border adjustment mechanism comes into force. The import of green HBI is likely to be crucial to Europe's efforts to decarbonise its steel sector, and MENA is ideally placed geographically to supply it. MENA is also well positioned to supply India, the key steel demand growth market globally. Decarbonisation of India's steel industry will occur later than Europe but likely happen faster than expected given the historical speed of technology transitions.

Growing global competition in the nascent green iron exports sector is further indication that the steel technology transition away from fossil fuels is accelerating. With some nations in the MENA region keen to diversify away from oil and gas, the development of a truly green steel industry is an opportunity to help achieve this. Steelmaking developments in the region should be built hydrogen-ready as far as possible, and the region should make the most of its advantage in low-cost renewable energy by adopting green hydrogen for iron and steel production as quickly as possible.

By moving quicker than other potential green iron producers, the MENA region can become a global leader in green iron exports. The early adoption of green

Steel mill product exports to MENA	2009(MMT)	2010(MMT)	2011(MMT)
EU27	9.3	7.9	8.0
Turkey	10.7	9.6	7.8
Ukraine	7.1	6.7	6.2
Russia	6.2	5.4	4.5
China	2.6	3.6	4.2
Other	8.4	9.3	9.3
Total	44.3	42.5	40.0
Destination			
North Africa	15.7	10.8	9.4
Middle East	28.5	31.6	30.6
Products			
Semis	10	11.1	9.3
Long Products	17.9	13.6	13.8
Flat Products	11.1	11.8	11.9
Tubes	5.3	6	5.1

#### **General ME - 2023 February 1**

hydrogen can also decarbonise steel made for domestic use. The Middle East and North Africa have good opportunities, but competition is intensifying. The MENA region (Middle East and North Africa) could become a global leader in green steel production and direct reduced iron (DRI) trade. This is stated in a study by the Institute for Energy Economics and Financial Analysis (IEEFA). The Middle East and North Africa (MENA) region is starting to emerge as a significant centre for steel production, as robust demand firms up the economic case for investment in local manufacturing capabilities. According to regional projects tracker MEED Projects, there are more than \$30bn-worth of steel-related schemes planned or under way in the region. Promising outlook for steel demand:

Qatar's \$35bn integrated rail project, which includes longdistance passenger and cargo lines, light railways and the Doha Metro, alone is expected to require 800,000 tonnes of steel. Meanwhile, in Iraq and Libya, steel demand is being driven by reconstruction activities financed by increasing oil income and which are proceeding at an impressive pace.

"The long-term outlook for the steel industry in the Middle East is very promising due to ambitious economic development plans by governments," says S Venkatesan, director, metals and minerals practice, Frost & Sullivan. Analysts say the GCC is the most attractive market for investment in new steel projects.

Industrialisation programmes in the GCC aimed at diversifying economies and generating employment opportunities have led to the creation of industrial cities and technology parks. Demand is

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RE-SP-2 Roller Entry Guides

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ES-Static Entry Guides

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Sliding Saddle Rest Bar

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![](_page_34_Picture_18.jpeg)

RE-AZ-Wire ROD Block Guides

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RE-EB-2 Roller Entry Guides

![](_page_34_Picture_22.jpeg)

TD- Trough Delivery Guides

![](_page_34_Picture_24.jpeg)

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## **View Point**

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remained stable at 3.5 MMT

Overall, the world's crude steel production was 1.87 billion tons in 2022, which was a 4.2pct decrease compared to 2021.

China's steel output declined by 2.1pct to 1.01 billion tons, while India's steel output increased by 5.5pct to 124.7 MMT. Source: MEsteel.com Crude steel production in Middle East in 2021. (MMTmillion metric tons). See the table below.

also coming from infrastructure and social housing projects. Saudi Arabia, for example, is committed to building 500,000 new homes and has major plans for new roads, a railway network and airports projects, all of which will require millions of tonnes of steel.

Regional steel output: Crude steel production in the Middle East totaled 24.2 million tonnes in 2012, up 5.3 per cent on the year before. Iran increased its output by 1.5 million tonnes to 14.5 million tonnes and is the largest producer in the region.

Egypt is the secondlargest and its output totalled 6.6 million tonnes last year. Saudi Arabia produced 5.2 million tonnes of steel in 2012, while Qatar produced 2.1 million tonnes. Steel production in Africa and the Middle East accounted for 2.6 per cent of the world total.

According to the World

Steel Association, the steel industry in the Middle East produced 44 mln tons of crude steel in 2022, a 7.1pct increase from the previous year.

The Middle East was the only region to experience positive growth in steel production. African steel production declined by 6.6pct to 14.9 12.9pct decrease from 2021. Iran's steel output crude steel production

MMT tons in 2022. Turkey, the major steel producer in the MENA region, produced 35.1 MMT tons, which was a

increased by 8pct to 30.6 MMT tons in 2022. Egypt's decreased by 4.6pct to 9.8 MMT tons. Saudi Arabia's crude steel output increased by 3.9pct to 9.1 MMT tons in 2022. The UAE's crude steel output increased by 7.1pct to 3.2 MMT tons in 2022. Algeria's crude steel output

![](_page_35_Picture_13.jpeg)

Country	Crude steel production (MMT)
Turkey	40.4
Iran	28.5
Egypt	10.3
Saudi Arabia	8.7
UAE	3
Oman	2
Kuwait	1.3

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## Ajay Tambe - Founder & CEO

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Technology

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## SteelFab 2024: Setting New Standards in Metalworking Excellence

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SteelFab 2024, the pinnacle event for the metalworking, manufacturing, and steel fabrication industry in the Middle East, celebrated its 19th edition from January 8th to 11th, 2024, at the prestigious Expo Centre Sharjah, UAE. This report encapsulates the event's monumental success, highlighting key achievements, engagements, and industry insights garnered during this esteemed gathering.

#### Key Highlights:

**Event Legacy:** With a rich history spanning 19 editions since 2004, SteelFab has solidified its reputation as the foremost platform for industry professionals to explore cutting-edge technologies and forge lucrative partnerships.

*Largest Display:* SteelFab 2024 presented the Middle East's most extensive live showcase of state-of-the-art welding and cutting machinery, drawing widespread attention from regional and international stakeholders.

Structural Steel-Fabrication Showcase: The event featured leading manufacturers showcasing the latest advancements in structural steel-fabrication machines, offering invaluable insights into the industry's evolving landscape

Engaging Competitions & Programs: Attendees were treated to an array of captivating activities, including the highly anticipated Best-Welder competition and the exclusive VIP Hosted-Buyers Program, fostering an environment of collaboration and knowledge exchange

. **B2B Matchmaking Excellence:** SteelFab facilitated seamless online and onsite B2B matchmaking and meetings, providing attendees with unparalleled networking

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opportunities to cultivate fruitful business connections. Visitor Satisfaction: SteelFab 2024 witnessed an impressive turnout, with 39% of attendees being first-time visitors, underscoring the event's growing prominence and relevance. Moreover, an astounding 80% expressed their intent to revisit next year, indicative of the event's unparalleled value proposition. Exhibitor Endorsement: A staggering 83% of exhibitors reaffirmed their commitment to participating in future editions, affirming SteelFab's indispensable role in driving industry growth and innovation.

In conclusion, SteelFab 2024 surpassed expectations, reaffirming its status as the premier destination for metalworking and steel fabrication professionals in the Middle East. As the industry continues to evolve, SteelFab remains at the forefront, facilitating unparalleled opportunities for knowledge

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## **Event Highlights**

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## Technology

dissemination, networking, and business expansion. With resounding success behind it, SteelFab 2024 has set a new benchmark for excellence in the realm of metalworking exhibitions, promising even greater achievements in the years to come.

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Steelworld' has been recognized as the Most Popular Magazine among exhibitors at Asia's largest steel fabrication trade show SteelFab, being organized at Expo Centre, Sharjah, UAE on an annual basis. Steelworld is associated with this show as 'Media Partner' since its inception.

In a recent survey conducted by the organizers, 'Steelworld' stood out as the most popular magazine for industry insights, trends, and news among exhibitors at SteelFab for the past few years.

As the premier publication in the iron and steel sector, 'Steelworld' continues to lead the way in providing valuable information and resources to professionals across the globe.

'Steelworld' would like to take a moment to thank all the readers for their continued support and trust !

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## Clean and Economical Transformation: the Power of Coal Gasification

#### Introduction:

In the pursuit of sustainable industrial practices, coal, often criticized for its environmental impact, is undergoing a remarkable transformation through the process of coal gasification. Considered one of the cleanest and most economical methods, coal gasification is emerging as a key player in the production of various chemicals, offering a promising alternative to traditional methods. This article explores the intricacies of coal gasification, its

advantages, and its potential to revolutionize the chemical industry.

#### Understanding Coal Gasification:

Coal gasification is a thermochemical process that converts coal into a synthesis gas, commonly known as syngas. The process involves reacting coal with oxygen and steam under high temperatures and pressure, leading to the production of a gas mixture primarily composed of carbon monoxide (CO) and hydrogen (H2). This syngas serves as a versatile and environmentally favorable

![](_page_40_Picture_7.jpeg)

Mr. Rahuel George Country Head, Case Group

feedstock for the production of various chemicals.

Advantages of Coal Gasification in Chemical Production:

#### 1. Cleaner Energy Source:

• Compared to traditional coal combustion, gasification significantly reduces the emission of pollutants such as sulfur dioxide and nitrogen oxides.

The absence of direct combustion in the gasification process contributes to lower levels of particulate matter and minimizes the environmental impact associated with coal use.

#### 2. Versatility of Syngas:

• Syngas derived from coal

![](_page_41_Picture_0.jpeg)

## Technology

gasification can be tailored to contain specific ratios of CO and H2, providing flexibility in chemical production.

This versatility allows for the synthesis of a wide range of valuable chemical products, including methanol, ammonia, Ammonia Nitrate etc., contributing to the diversification of the chemical industry.

#### 3. Carbon Capture Opportunities:

• Coal gasification facilitates the integration of carbon capture utility storage (CCUS) technologies, mitigating greenhouse gas emissions.

By capturing and storing CO2 generated during the gasification process, industries can contribute to the global effort to combat climate change.

#### 4. Improved Energy Efficiency:

• The synthesis gas produced through coal gasification can be used in highly efficient combined heat and power (CHP) systems, enhancing overall energy efficiency.

The co-generation of heat and power makes the process economically viable, contributing to the sustainability of coal-tochemicals production. *Economic Viability and Global Implications:* 

#### 1. Cost-Effectiveness:

• Coal gasification offers a cost-effective alternative for chemical production, as it maximizes the use of coal resources while minimizing waste.

The economic viability of this method can lead to increased competitiveness in the global market, especially in regions rich in coal reserves.

#### 2. Energy Security:

• Nations with abundant coal reserves can achieve greater energy security by utilizing coal gasification for chemical production, reducing dependence on imported feedstocks.

#### **Conclusion:**

Coal gasification stands

at the forefront of the coal-tochemicals revolution, offering a cleaner and economically viable pathway for the production of valuable chemical products. As technology continues to advance and global initiatives focus on sustainable industrial practices, coal gasification is poised to play a pivotal role in shaping a more environmentally friendly and economically sustainable future for the chemical industry.

CASE Group in India is strongly following the vision to use coal through coal gasification process and make chemicals and hydrogen in downstream processes. The above technology is sustainable and will make India self-reliant in energy chemicals and fertilizers.

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## Mukand Ltd. Partners with Amplus Phoenix for 23.89 MWp Solar Project

Mukand Limited, a distinguished Bajaj group company and a leading manufacturer of Alloy and Stainless-Steel long products, along with heavy machinery in India, has inked a groundbreaking Power Delivery Agreement (PDA) with Amplus Phoenix Energy Pvt Limited (APEPL), a proud member of the PETRONAS Group. This collaboration marks a significant step towards fostering clean energy solutions and sustainable practices in the steel manufacturing industry.

The 23.89 MWp Group Captive Solar project, nestled in the picturesque Hulkoti village in the Gadag district of Karnataka, embodies Mukand Limited's commitment to environmental stewardship and energy efficiency. Expected to generate 36 MUs annually, this solar venture is projected to offset approximately 28,440 tonnes of CO2 emissions per year.

The collaboration with APEPL underscores Mukand's dedication to reducing its carbon footprint and embracing non-conventional energy solutions. Scheduled for commissioning by March 2024, this solar power plant adheres to stringent quality standards and specifications, ensuring reliability and operational

![](_page_43_Picture_5.jpeg)

excellence. The aim of the installation is to meet the growing energy requirements of Mukand Limited and contribute to making their steel manufacturing processes and production greener. APEPL will undertake the construction, operation, and maintenance of this group captive solar power plant.

Shashibhushan Upadhyay, President of Mukand Limited, conveyed appreciation for the concerted endeavors of **Amplus Phoenix Renewables** and Mukand Limited. He remarked, "We express our gratitude and recognize the collaborative initiatives between Amplus Phoenix Renewables and our organization, Mukand Limited, to unlock the potential of clean and green energy through the execution of this strategic Power Purchase Agreement (PPA). This partnership aligns with our mission to procure clean energy to power our manufacturing operations and aids us in fulfilling our climate change commitments. "

Speaking on the occasion, Sharad Pungalia, MD & CEO of Amplus Group said, "Greening energy-intensive sectors like steel manufacturing is critical for a sustainable future, and we at Amplus are happy to contribute with our experience and expertise. We are confident of providing a stable and reliable source of green electricity to Mukand Limited as they contribute to the region's environmental and economic development. With this agreement, we collectively commit ourselves to achieve a sustainable energy future." The adoption of green energy through this project marks a significant stride in Mukand Limited's commitment to environmental sustainability. By harnessing clean and renewable energy sources, this initiative is poised to substantially reduce its carbon footprint, contributing to a healthier and greener planet. Embracing the principles of responsible corporate citizenship, this agreement not only underscores Mukand's dedication to meeting climate change commitments but also exemplifies the pivotal role the corporate sector plays in driving positive environmental change. The transformative impact of this endeavor extends beyond the organization, fostering a collective responsibility to create a more sustainable future for generations to come.

![](_page_44_Picture_0.jpeg)

## **Statistics**

## Passenger vehicle wholesale surges 14% in Jan: SIAM

The passenger vehicles grew 14% year-on-year to 3,93,074 units in January this year as against 3,46,080 units in the same period last year buoyed by positive consumer sentiments, according to the latest data by the Society of Indian Automobile Manufacturers (SIAM).

Among passenger vehicles, Maruti Suzuki, the country's largest automobile manufacturer, sold 1,66,802 units in the domestic market in January, up 13.2% against 1,47,348 units in the same period last year.

The company's exports during the month under review stood at 23,694 units, as against 17,083 units in January last year.

This was followed by South Korean automaker Hyundai Motor India, whose domestic wholesales stood at 57,115 units, witnessing a growth of 13.9% as against 50,106 units in the same period last year.

However, Hyundai Motor's exports declined in January by 13.7% to 10,500 units as against 12,170 units in the same period last year amidst the red-sea crisis. Notably, Mahindra and Mahindra, the country's largest sports utility vehicle (SUV) manufacturer, witnessed a 23.2% increase in domestic wholesales to 43,068 units against 33,040 units in the same period last year. Like its peers, the company's exports also witnessed a decline of 44.5% to 1,474 units, as against 817 units in the same period last year. Among automakers, the domestic wholesales of South Korean automaker Kia India, however, slumped 16.9% to 23,769 units in January this year, against 28,634 units in the same period last year. The company's exports declined by 80.2% year-on-year to

1,305 units as against 6,608 units in the same period last vear.

Meanwhile, the domestic wholesales of two-wheeler manufacturers including electric vehicles grew by 26.2% YoY to 14,95,183 units against 11,84,376 units in the same period last year owing to an increase in rural demand. The two-wheeler manufacturers' exports in January this year stood at 2,60,308 units as against 2,20,103 units in the same period last year.

The domestic three-wheeler wholesales in January increased by 9.4% to 53,537 units as against 48,903 units in the same period last year. "Passenger Vehicle sales have remained resilient led by positive consumer sentiments, while the two-wheeler Segment witnessed good growth in January as well, as the rural market continues to recover.

The three-wheeler segment has also performed better. Though the Commercial Vehicle Sector did not grow in January 2024, it is likely to see good offtake in the next 2 months of this financial year. Government's strategic focus on mobility in Budget 2024, including strengthening the electric vehicle ecosystem, especially the charging infra and public transport, should help in continuing with the overall growth momentum for the Auto Sector," says Vinod Aggarwal, president, of SIAM.

Uttar Pradesh recorded the highest number of vehicle sales in October-December 2023, followed by Maharashtra, Gujarat and Tamil Nadu, according to Society of Indian Automobile Manufacturers. As per data from Society of Indian Automobile Manufacturers (SIAM), Uttar Pradesh clocked a total sales of 8,22,472 units across passenger and commercial vehicles; and two and three-wheeler categories. Maharashtra was second with 6,88,192 units across the four categories followed by Gujarat with 4,21,026 units and Tamil Nadu 4,19,189 units in the quarter.

Uttar Pradesh witnessed the highest number of threewheelers sold in the guarter at 23,859 units, followed by Maharashtra (20,495), Gujarat (19,743) and Bihar (14,955).

Similarly, in the two-wheeler category, Uttar Pradesh topped the list with a total of 6,73,962 units sold in the state, followed by Maharashtra (5,15,612), Madhya Pradesh (3,35,478) and Tamil Nadu (3,24,918).

However, in passenger vehicle sales, Maharashtra clocked the highest sales with 1,21,030 units, followed by Uttar Pradesh (1,01,568), Gujarat (85,599) and Karnataka (71, 549).

In the commercial vehicles category also, Maharashtra topped the list with 31,055 units, followed by Uttar Pradesh (23,083), Gujarat (20,391) and Karnataka (16,966).

![](_page_45_Picture_1.jpeg)

		81AM				
Segment wise Comparative Production, Domestic Sales & Exports data for the month of January 2024						
(Number of Vehicles)						
Category	Production Domestic Sales Exports					
Segment/Subsegment	January		January		January	
	2023	2024	2023	2024	2023	2024
Passenger Vehicles (PVs)*						
Passenger Cars	1.87,543	1.71,437	1.36,931	1,26,505	31.001	29.812
Utility Vehicles (UVs)	1.79,899	2.33,373	1,49,328	2,00.917	24,586	18,853
Vans	13,040	13,138	11,834	12,019	22	580
Total Passenger Vehicles (PVs)	3,80,482	4,17,948	2,98,093	3,39,441	55,609	49,245
Three Wheelers						
Passenger Carrier	60,016	63,962	37,061	41,837	22,995	19,616
Goods Carrier	8,807	10,017	8,346	10,000	85	374
E-Rickshaw	4,376	2,569	3,188	1.262	-	-
E-Cart	378	576	308	438	-	-
Total Three Wheelers	73,577	77,124	48,903	53,537	23,080	19,990
Two Wheelers						
Scooter/ Scooterettee	4.04,458	5,44,342	3,76,032	4,87,534	30.256	36,322
Motorcycle/Step-Throughs	10.12,291	12,46,701	7,71,621	9,65,613	1,89.439	2,23,986
Mopeds	37,727	41,620	36,723	42,036	408	-
Total Two Wheelers	14,54,476	18.32,663	11,84,376	14,95,183	2,20,103	2,60.308
Quadricycle	371	594	72	33	306	372
Grand Total	19,08,906	23,28,329	15,31,444	18,68,194	2,99,098	3,29,915
- HMW Mercedes.JLR Tata Motors and Volve Auto data is not svallable Society of India - Automoti e Manufacturers (14/02/2024)						

\$1.4 <i>M</i>						
Summary Report: Cumulative Production, Domestic Sales & Exports data for the period of April-January 2024						
					Report I	
	(Number of Vehicles					
Category	Production Domestic Sales Expor				orts	
Segment/Subsegment	April-January		April-January		April-January	
	2022-23	2023-24	2022-23	2023-24	2022-23	2023-24
Passenger Vehicles (PVs)*						
Passenger Cars	18,02,968	16,37,121	14.36,828	12,80,899	3,47.290	3,60,191
Utility Vehicles (UVs)	18,25,695	22.20,894	16.18,920	20,20.396	1,98.966	1,88,819
Vans	1.15,055	1.19,681	1.14.104	1,21.391	317	6,452
Total Passenger Vehicles (PVs)	37,43,718	39,77,696	31,69,852	34,22,686	5,46,573	5,55,462
Three Wheelers						
Passenger Carrier	6,04,601	7.08,896	2.82,186	4,59,543	3,22.433	2,47,054
Goods Carrier	61,362	93,351	77,968	89,851	4.142	2,801
E-Rickshaw	22,125	27,983	21,321	28,086	-	-
E-Cart	2,648	2,840	2,551	2,962	-	-
Total Three Wheelers	7,10,736	8,33,070	3,84,026	5,80,442	3,26,575	2,49,855
Two Wheelers						
Scooter/ Scooterettee	46,72,260	52.74,722	43.62,031	48,57.373	3,40.636	4,21,096
Motorcycle/Step-Throughs	1.15.07,664	1,20.99,719	87.11.119	97,08.775	28,27.909	23,80,465
Mopeda	3,54,240	4.01,856	3.69,407	3,99.877	2.916	1,656
Total Two Wheelers	1,65,44,164	1,77,76,297	1,34,42,557	1,49,66,025	31,71,461	28,03,217
Quadricycle	1,904	3,865	513	658	1,506	3,080
Grand Total	2.10,00,522	2,25,90,928	1,69.96,948	1,89,69,811	40,46.115	36,11,614
* BNW/ Mercedes, JLR, Volvo A, to data is not available and Tata Motors cata	is available for April-Depe	mber only				
Society of Indian Automobile Manufacturers (14/02/2024)						

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![](_page_46_Picture_0.jpeg)

![](_page_46_Picture_1.jpeg)

![](_page_46_Picture_2.jpeg)

# JSP PRODUCTS THAT ARE POWERING INDIA'S INFRASTRUCTURE REVOLUTION

![](_page_46_Picture_4.jpeg)

![](_page_46_Picture_5.jpeg)

TMT REBAR
CHANNELS
RAILS
BEAMS
WELDED WIRE MESH
PLATES
WIRE ROD
ANGLES

SHEET PILE
TRACKSHOE.
HR COILS
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PRE FABRICATED STRUCTURE
SPEED FLOOR
BINDING WIRE

A PRODUCT OF JINDAL STEEL & POWER

![](_page_47_Picture_1.jpeg)

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