The Dawn of 2025, Part 8: How Green Steel Faces an Iron Ore Bottleneck

Updated on: Jan 17, 2025

Synopsis: The steel industry's shift towards decarbonization, through hydrogen-based direct reduction technology, is hampered by a significant supply chain issue, the scarcity of suitable iron ore. While hydrogen offers a greener alternative to traditional blast furnaces, the industry's growing demand for high-grade iron ore to support DRI methods highlights a significant bottleneck. This article explores the role of magnetite in the green steel revolution, the ongoing challenges in securing DR-grade ore, and the efforts of iron ore miners to meet the evolving needs of a decarbonizing steel sector.

SWFI Discusses Emergency Measures to Protect State-Owned Steel Plants from **Harmful Policies**

Updated on: Jan 17, 2025

Synopsis: The Steel Workers' Federation of India convened an emergency meeting in Kolkata to address the deteriorating conditions at the Visakhapatnam Steel Plant and raise concerns over the long-term lease of Odisha's Taldih mines to the Adani Group. The SWFI aims to safeguard government-owned steel plants from policies perceived as detrimental to their operation and growth.

Whyalla Steelworks Faces Severe Setback as 350 Job Cuts Hit South Australia's **Steel Industry**

Updated on : Jan 17, 2025

Synopsis: The South Australian steel industry faces another blow as 350 job cuts are announced at Whyalla's steelworks. The closures, linked to dwindling iron ore reserves and financial struggles, come after months of uncertainty, adding to the town's growing economic challenges.

GLGH Steel Expands Global Reach with Acquisition of Romania's Artrom Steel Tubes

Updated on : Jan 17, 2025

Synopsis: GLGH Steel, a subsidiary of Great Lakes Global Holdings, has successfully acquired Artrom Steel Tubes S.A., a leading Romanian seamless steel tubes producer. This acquisition aims to expand the company's global market presence, focusing on growth in Europe, North America, and new strategic areas like defense production and decarbonization.

Welspun Corp Partners with Saudi Aramco for \$350,000 Metric Ton LSAW Pipe Facility in Saudi Arabia

Updated on : Jan 17, 2025

Synopsis: India's Welspun Corp has signed a memorandum of understanding with Saudi Aramco to set up a state-of-the-art LSAW line pipe manufacturing plant in Saudi Arabia. The facility, with a production capacity of 350,000 metric tons per year, is expected to support future oil, gas, and hydrogen transmission projects.

Aperam's Strategic Acquisition of Universal Stainless to Enhance Global Steel **Capabilities**

Updated on: Jan 17, 2025

Synopsis: Aperam S.A. has successfully acquired Universal Stainless & Alloy Products, marking a major step in expanding its steel manufacturing footprint. With a focus on stainless, electrical, and specialty steels, this acquisition broadens Aperam's product portfolio and geographical presence, particularly in the U.S. aerospace and industrial sectors.

Green Esteel Acquires Controlling Stake in Southern Steel with RM315.86 Million Deal

Updated on: Jan 17, 2025

Synopsis: Green Esteel Pte Ltd, a steel firm based in Singapore, has gained control of Southern Steel Bhd with a 50.1% stake following a RM315.86 million share issuance. This marks a significant shift in ownership, making Southern Steel a subsidiary of Green Esteel. The acquisition is part of Green Esteel's broader strategy to expand its footprint in the steel industry.

Bokaro Steel Plant Set to Revolutionize Production with Thin Slab Caster Technology in Rs 15,000 Crore Expansion

Updated on: Jan 17, 2025

Synopsis: Bokaro Steel Plant, part of Steel Authority of India Limited, plans to introduce thin slab caster technology as part of a Rs 15,000 crore brownfield expansion. This initiative aims to enhance the plant's steel quality and operational efficiency. With an investment of 2.62 million metric tons in new facilities, the project will also focus on renewable energy sources and sustainability.

INOX Air Products Powers Bokaro Steel with Rs 750 Crore Investment in Mega Air **Separation Unit**

Updated on: Jan 17, 2025

Synopsis: INOX Air Products has commissioned its largest-ever Air Separation Unit at Steel Authority of India's Bokaro Plant. With an investment of Rs 750 crore, this 2,150 metric tons per day ASU is set to generate crucial industrial gases, bolstering SAIL's operations and reinforcing INOXAP's long-standing partnership with the steel giant.

Cividale's Stake in Russian Steel Plant Sanctioned by US Raises Concerns

Updated on: Jan 17, 2025

Synopsis: The Italian steel company Cividale remains a minority shareholder in the Russian foundry BVK, which was sanctioned by the US in 2024. Despite international sanctions, Cividale continued supplying industrial equipment to Russia, raising questions about its compliance with global restrictions.

BZI®: A Trailblazer in Construction & Steel Innovation Shines in 2024

Updated on : Jan 17, 2025

Synopsis: BZI® celebrates another remarkable year in 2024 with exceptional growth in production, installations, customer acquisition, and industry recognition. Expanding into new sectors such as data centers, EV manufacturing, and more, BZI's commitment to safety, innovation, and community engagement continues to set it apart as an industry leader.

Fabweld Steel Products Unveils Ambitious Growth Strategy with Major Investment in New Laser Technology

Updated on : Jan 17, 2025

Synopsis: Fabweld Steel Products, a leading manufacturer of access covers and steel products for the water sector, has made a significant investment in a 15kW Accurl Fibre Laser to enhance its production capacity. The move is part of a bold growth strategy aimed at increasing turnover by 75% within five years, ensuring the company's future success.

SAIL Fuels India's Naval Might with 4,000 Metric Tons of Special Steel for INS Nilgiri

Updated on: Jan 17, 2025

Synopsis: Steel Authority of India Limited has proudly supplied 4,000 metric tons of special steel for the construction of INS Nilgiri, India's indigenous warship.

New Petitions Spark Investigation into Chinese Steel Fencing: US Seeks **Antidumping Measures**

Updated on : Jan 17, 2025

Synopsis: On January 14, 2025, ZND US Inc filed petitions with the U.S. Department of Commerce and the U.S. International Trade Commission, requesting antidumping and countervailing duties on temporary steel fencing from China. The petition aims to address concerns about unfair pricing and government subsidies affecting the U.S. market for steel products used in construction, events, and security.

South Korea Proposes Anti-Dumping Tariff on Chinese Stainless Steel Plates

Updated on: Jan 17, 2025

Synopsis: South Korea's Ministry of Trade, Industry, and Energy has proposed a preliminary anti-dumping tariff of 21.62% on stainless steel plates imported from China. The decision comes after determining that the domestic industry has been harmed by dumping practices. The proposed tariff aims to prevent further damage during an ongoing investigation.

US Enforces Ban on Connected Vehicle Systems from China & Russia Amid National **Security Concerns**

Updated on: Jan 17, 2025

Synopsis: nOn January 14, 2025, the US government finalized a ban on the import and sale of connected vehicle hardware and software from China and Russia, citing national security threats. The restrictions, set to take effect in Model Year 2027 for software and 2030 for hardware, will impact automotive supply chains and data privacy, sparking strong opposition from China.

Canada Pioneers Sustainable Nickel Production with Cutting-Edge Processing **Facility in Ontario**

Updated on: Jan 17, 2025

Synopsis: Canada Nickel Company, through its subsidiary NetZero Metals Inc., is set to launch a groundbreaking nickel processing facility near Timmins, Ontario. The facility, backed by a US\$500,000 grant from the Ontario government, will refine nickel concentrates into valuable products while using innovative, low-carbon technologies. The plant aims to produce over 75,000 metric tons of nickel annually, solidifying Ontario's position as a leader in sustainable critical mineral production.

Arch Resources & CONSOL Energy Merge to Form Core Natural Resources for **Global Coal Supply**

Updated on : Jan 17, 2025

Synopsis: US coal giants Arch Resources and CONSOL Energy have merged to form Core Natural Resources. With a combined production capacity of 12 million metric tons of metallurgical coal annually, the new company will serve global markets in steel, industrial, and power generation sectors.

Port Hedland's Iron Ore Shipments Decline in December Amid Global Shifts

Updated on: Jan 17, 2025

Synopsis: Port Hedland in Western Australia saw a decrease in iron ore shipments in December, with exports dropping both year-on-year and month-on-month. The shipments to key markets, particularly China, South Korea, and Japan, also showed varying trends, reflecting market shifts in global demand for iron ore. Despite these declines, Port Hedland remains a crucial hub for Australia's iron ore exports.

Tata Steel & MECON Forge Strategic Alliance for Sustainable Mining Solutions

Updated on: Jan 17, 2025

Synopsis: Tata Steel and MECON have teamed up to offer cutting-edge integrated mining services, focusing on sustainability and advanced technical solutions. This partnership combines Tata Steel's mining expertise with MECON's technical capabilities, aiming to enhance mining standards and promote eco-friendly practices in India.

Maximizing Steel Production through Screening: Experts Convene at IIM Jamshedpur Seminar

Updated on: Jan 17, 2025

Synopsis: The IIM Jamshedpur chapter, in partnership with Tata Steel, CSIR-NML, and NIT Jamshedpur, hosted an international seminar on Screening and Sizing. The seminar emphasized the critical role of screening in enhancing steel production by utilizing low-grade ores and turning waste into valuable resources. Experts from across the globe gathered to discuss innovations in the steel industry, focusing on sustainability and efficiency.

Laser 3D Printing Boosts Heat-Resistant Steel's Creep Life by Over 10 Times

Updated on: Jan 17, 2025

Synopsis: A groundbreaking study from the National Institute for Materials Science has shown that laser powder bed fusion, a form of 3D printing, can significantly increase the creep life of heat-resistant steel. The technique enhances the material's ability to withstand high temperatures and pressures for much longer periods, offering a tenfold increase in durability compared to conventional steel production methods.

Revolutionizing Structural Efficiency: Exploring the Axial Behavior of Square Corrugated Concrete-Filled Tubes

Updated on : Jan 17, 2025

Synopsis: This study delves into the axial compressive behavior of square Concrete-Filled Double-Skin Steel Tubular columns, investigating how different plate shapes (flat vs. corrugated) and varying internal tube widths affect performance. Results demonstrate that incorporating corrugated internal plates significantly boosts both load-carrying capacity and ductility, marking a breakthrough in steel-concrete composite construction. Additionally, machine learning models were utilized to predict column strength, improving accuracy in design.