





Zhuzoor Infratech Private Limited is redefining how construction materials are sourced and supplied. By offering top-quality materials at competitive prices, seamless logistics, and flexible financing, Zhuzoor is quickly becoming the go-to marketplace for contractors and builders across the industry.



Table of **Contents**

FOREWARD

SEPTEMBER 2024 | VOL 34/M 02

Forging the Future: India's Stainless Steel Industry and the Automotive Revolution on a Path to Sustainable Growth	02
STAINLESS STEEL	
ARTICLE "Unlocking Potential: Expansion and Emerging Applications in the Stainless Steel Market" By SERC	05
REPORT Global stainless steel production reached 14.6 million metric tons (MMT) in the first quarter of 2024 By World Stainless Association	11
AUTOMOBILE	
REPORT Auto Industry Performance - June 2024 By SIAM	13
ARTICLE India's Electric Vehicle sales trend - August 2024 By EVreporter.com	14
Vehicle Retail Data - August 2024 By FADA	21
Consumer Analysis of Global Automotive 2024 By Deloitte	28
COUNTRY FOCUS (BRAZIL)	
ARTICLE Brazil's Industrial and Economic Development & Future Growth By SERC	31
Changing Climate in Brazil Key Vulnerabilities and Opportunities By Chen Chen, Koralai Kirabaeva, Christina Kolerus, Ian Parry, and Nate Vernon	34
REPORT IRMA's 11th AGM: Celebrating Progress and Paving the Way for a Sustainable Future in the Refractory Industry By SERC	45
DATA	
Brazil Economic Data	40
Import & Export	47
Steel Market Price	54

Printed and Published by Ms. Sakuntala C. Chanda on behalf of Spark Economy Research Centre at SERC. The views and data given by the authors are their own and the Journal is not responsible for their authenticity

FOREWARD



SAKUNTALA CHANDA Editor & Publisher

Forging the Future: India's Stainless Steel Industry and the Automotive Revolution on a Path to Sustainable Growth

The stainless steel industry in India is on the cusp of significant growth, forecasted to expand 1.8 times by 2034. This surge is driven by a predicted compound annual growth rate (CAGR) of 1.8%, as stainless steel usage continues to rise across automotive, construction, and industrial sectors. Key factors include rapid industrialisation, urbanisation, and the Indian government's investment in infrastructure development. By 2034, India's stainless steel revenue is expected to reach an impressive US\$ 31,905.2 million.

Regional Insights: West India is poised to remain the hotbed for stainless steel manufacturers, expected to hold 43% of the industry share by 2034. This is largely due to its proximity to raw materials, robust industrial infrastructure, and the presence of diverse end-user industries. Gujarat and Maharashtra, strategically located near major ports, enjoy logistical advantages that position the region as a key player in both domestic and international stainless steel markets.

The region's industrial base spans sectors such as automotive, petrochemicals, construction, and pharmaceuticals, all of which rely heavily on stainless steel for various applications. This diversified demand provides manufacturers in West India with a steady market, enabling continuous growth and investment in production capabilities.

Austenitic Stainless Steel Dominates the Market

Austenitic stainless steel remains the preferred choice across industries, accounting for approximately 72.7% of the volume share in 2024. Its dominance is attributable to its versatility, ease of fabrication, and superior properties, including high corrosion resistance, which make it suitable for a wide range of applications.

1. Versatility and Flexibility: Austenitic stainless steel can be easily formed into sheets and other complex structures, making it highly adaptable for diverse manufacturing processes such as forging, machining, and fabrication. This flexibility enhances its appeal across industries like aerospace, industrial machinery, and consumer goods.

2. High-Temperature Strength and Corrosion Resistance: Austenitic grades exhibit excellent performance in high-temperature environments, making them ideal for use in heat-sensitive applications such as industrial furnaces, air filters, and aerospace components. Moreover, their inherent corrosion-resistant properties allow them to withstand harsh conditions, further expanding their application in industries like oil and gas, pharmaceuticals, and food processing.



3. Cost-Effectiveness and Structural Integrity: With its combination of affordability and reliability, austenitic stainless steel offers significant advantages in terms of lifecycle cost, maintenance, and structural durability, especially for industries focused on performance without compromising safety.

Stainless Steel in Automotive and Transportation: A Critical Growth Driver

The automotive and transportation sectors are crucial to the growth of the stainless steel industry in India. Stainless steel's corrosion resistance, strength, and durability make it indispensable in automotive applications such as exhaust systems, catalytic converters, gas tanks, brake lines, and body panels.

1. Increased Adoption in Light weighting Initiatives: Automotive manufacturers are increasingly turning to stainless steel to reduce vehicle weight while maintaining safety and performance standards. This is particularly critical as the industry shifts towards producing lighter, more fuel-efficient vehicles that meet stringent emissions regulations.

2. Applications in Railways and Bus Bodies: Stainless steel is widely used in the construction of railways, from tracks to rolling stock, due to its structural stability and low maintenance requirements. Similarly, bus manufacturers are adopting stainless steel for structural frameworks and body panels, especially in Europe, where corrosion resistance and long-term durability are critical.

3. The Rise of Electric Vehicles (EVs) and Autonomous Vehicles: The shift towards electric and autonomous vehicles is further amplifying the need for durable materials like stainless steel. With its excellent corrosion resistance, design versatility, and ability to perform under extreme conditions, stainless steel is fast becoming a preferred material in the production of EV components and structural frames.

Looking Ahead: Innovations and Sustainability in Stainless Steel Manufacturing

As the stainless steel industry evolves, the focus will increasingly be on adopting sustainable production processes, developing innovative stainless steel alloys, and enhancing the material's applications across high-growth sectors. The rising demand for electric vehicles, coupled with ongoing research into new stainless steel applications-such as all-stainless catalytic converters and tubular framework designs-will further drive industry advancements.

Additionally, the ongoing efforts to integrate stainless steel into autonomous and connected vehicles highlight the material's critical role in shaping the future of transportation. The Indian government's continued investment in infrastructure development and the broader push toward industrialisation will further cement stainless steel's place as a cornerstone of India's economic growth.

In conclusion, stainless steel's unique combination of properties-corrosion resistance, strength, flexibility, and cost-effectiveness-positions it as an essential material for the future of industrial, automotive, and construction sectors. As the industry adapts to emerging trends and technological advancements, stainless steel will remain a vital component in driving sustainable and resilient infrastructure in India and beyond.

Please subscribe to continue reading.....