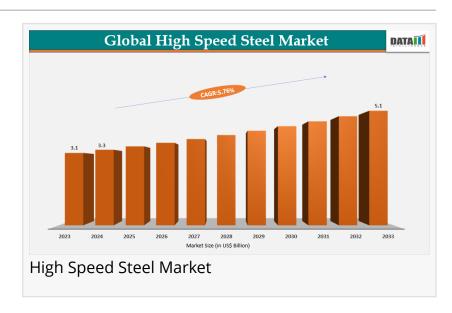


# High Speed Steel Market to Hit \$5.1 Bn by 2032 at 5.76% CAGR During 2025–2032 | DataM Intelligence

Global High Speed Steel Market was \$3.1Bn in 2024 and is projected to reach \$5.1Bn by 2032, growing at a steady 5.76% CAGR during 2025–2032.

TEXAS, TX, UNITED STATES, September 25, 2025 /EINPresswire.com/ -- Global High Speed Steel Market reached US\$ 3.1 billion in 2024 and is expected to reach US\$ 5.1 billion by 2032, growing with a CAGR of 5.76% during the forecast period 2025-2032.



The global high-speed steel market is witnessing robust growth, driven by increasing demand from automotive, aerospace and industrial machinery sectors. Rapid industrialization and the expansion of manufacturing capacities in the Asia-Pacific are major contributors to market growth. Governments worldwide are promoting local production of specialty steels to reduce imports, with India's Production Linked Incentive (PLI) Scheme being a key example, aiming to attract US\$ 3.34 billion (Rs. 29,500 crores) of investment and create an additional 25 million tons of capacity. This policy-driven boost is expected to directly enhance high-speed steel manufacturing and adoption.

Download Latest Sample of This Strategic Report@ https://www.datamintelligence.com/download-sample/high-speed-steel-market

Advanced machining, precision tooling and metal cutting applications are further boosting market demand. In April 2022, JFE Steel Corporation and ThyssenKrupp Steel Europe launched 980 and 1180 MPa-class high-strength steel sheets for automobile frames, highlighting the trend toward stronger, formable materials, indirectly supporting HSS use in tooling.

Moreover, technological advancements, including cobalt and molybdenum-enriched HSS grades, improve tool performance and broaden industrial applications. Rising construction and infrastructure projects globally increase the need for precision-cut components. Industrial

automation and CNC machining adoption also favor high-performance HSS tools.

Growth Driver: Rising Demand in Precision Manufacturing

The global high-speed steel market is being strongly driven by the rising demand in precision manufacturing, as industries worldwide seek durable and high-performance cutting tools. In India, the automotive sector exemplifies this trend, producing 28.4 million vehicles in FY 2023-24, up from 25.9 million the previous year, according to SIAM (Society of Indian Automobile Manufactures). Passenger vehicle sales rose to 4.21 million units, utility vehicles to 2.5 million and vans to .14 million units, reflecting robust segmental growth. This surge in vehicle production increases the need for high-quality HSS cutting tools used in machining engine components, gears and other precision parts.

Meanwhile, in the U.S. aerospace and defense sector, 2023 sales surpassed US\$ 955 billion, a 7.1% increase from the prior year, according to IEA, underscoring the industry's reliance on precise machining tools for turbine blades, airframe components and critical assemblies. High-speed steel tools enable manufacturers to maintain accuracy and performance even under high-speed, high-temperature operations. Overall, precision manufacturing acts as a core growth engine for the global high-speed steel market, linking automotive, aerospace, medical and general engineering sectors.

## Sustainability Analysis:

The high-speed steel market is increasingly embracing sustainability as a core growth driver, balancing performance with environmental responsibility. Manufacturers are adopting energy-efficient production methods and advanced recycling techniques to reduce carbon emissions and material waste. For instance, in June 2024, Erasteel became the first global producer of HSS to achieve EPD certification, covering conventional steels and products made from recycled batteries and spent oil catalysts, signaling a new benchmark for transparency and a low carbon footprint. This milestone demonstrates the potential of using over 91% recycled materials, aligning high-performance steels with circular economy principles.

Powder Metallurgical HSS production is also moving toward eco-efficient processes, further reducing resource consumption. Sustainability is reinforced through Life Cycle Assessments following ISO 14040/44 and ISO 14025 standards, ensuring measurable environmental impact. End-users in automotive and aerospace sectors increasingly prefer HSS tools with higher durability, supporting resource conservation and green manufacturing initiatives.

Global policy frameworks and incentives are encouraging innovation in eco-friendly steel production. For instance, in April 2025, Germany and Australia launched the SuSteelAG project, exploring hydrogen-based reduction of low-grade iron ores to cut CO $\Box$  emissions, showing that sustainable raw material sourcing is now a strategic focus. The use of a rotary kiln process in SuSteelAG illustrates how technology can expand green production to previously underutilized

ores. This project also highlights the importance of international collaboration to create low-carbon steel value chains.

HSS manufacturers are investing in cleaner alloying methods and nano-coatings to extend tool life and reduce replacement frequency. Energy-efficient furnaces and hydrogen-based processes are gradually becoming industry standards. Digitalization and predictive maintenance help optimize resource use and minimize environmental impact. Overall, HSS is shifting toward sustainable, high-performance and low-carbon production.

Segment Growth: Rising Vehicle Production in Automotive Sector Drives the Demand

Automotive end-user is expected to hold about 30.7% of the global market in 2024. The automobile sector is one of the main end users of high-speed steel (HSS), using it largely for cutting tools, drills, milling cutters, gear production and engine component machining. With global vehicle manufacturing expected to exceed 93.5 million units by 2023 (OICA), there is an increasing demand for precise tooling and long-lasting cutting materials. HSS is still important because of its cost-effectiveness, heat resistance and toughness, especially in processes like gear hobbing, crankshaft machining and fastener manufacturing.

While cemented carbides and ceramics are gaining popularity in high-speed machining, HSS continues to account for a sizable proportion of cutting tools in vehicle manufacturing, particularly in developing economies where price is critical. The competition in the automotive sector is influenced by a combination of global metallurgical corporations and specialized cutting tool manufacturers. Voestalpine, Erasteel and Nachi-Fujikoshi manufacture premium-grade HSS alloys for automotive machining applications, while Kennametal, Sandvik and OSG Corporation specialize in finished HSS tools designed for automotive production lines.

Regional Growth: Rising Demand for Huge Machine Tools and Automotive Sector in Asia-Pacific

Asia-Pacific high-speed steel (HSS) market is the world's largest, accounting for about 35.23% of the global market in 2024, with China alone accounting for the majority of global production due to its huge machine tool and automobile industries. As per the World Steel Association, China will generate more than 1 billion metric tons of crude steel in 2023, providing a strong raw material base for specialty steels such as HSS. Japan and South Korea, despite their smaller volume, dominate the high-value market with superior metallurgy and tool-making skills, providing industries such as aerospace, electronics and high-precision automobile components.

China's high speed steel market prognosis remains positive, as it is the dominant country in high speed steel, accounting for more than 40% of the regional market. Chinese companies like as Tiangong International and Baosteel Special Metals are increasing production to meet increased demand for low-cost HSS tools, while Japanese firms such as Nachi-Fujikoshi and Hitachi Metals maintain strong positions in the premium cutting tool category. Global firms such as Voestalpine maintain a significant presence through local subsidiaries and partnerships, particularly in India

and China.

India's high speed steel market is expanding rapidly, fueled by its burgeoning automotive sector and government-led "Make in India" efforts that drive local tool manufacture. The expansion of industries such as automotive and aerospace has increased demand for high-speed steel. Rising construction and infrastructure projects globally increase the need for precision-cut components. Industrial automation and CNC machining adoption also favor high-performance HSS tools in India.

## Competitive Landscape

The global high-speed steel market is characterized by a competitive landscape that includes both established steel makers and specialist tool producers. Key players include Voestalpine AG, NIPPON STEEL CORPORATION, Fushun Special Steel Co., Ltd., Daido Steel Co., Ltd., Graphite Limited, ArcelorMittal S.A., Heye Special Steel Co., Ltd., Hudson Tool Steel Corporation, West Yorkshire Steel Co., Ltd. and Sandvik AB.

The firms emphasize product distinctiveness by providing premium HSS grades with improved wear resistance, toughness and performance in demanding cutting and drilling applications. Strategic expenditures in R&D, sustainability initiatives and manufacturing efficiency are particularly critical, as the industry faces competition from replacements such as cemented carbides and ceramics.

Looking for in-depth insights? Grab the full report: <a href="https://www.datamintelligence.com/buy-now-page?report=high-speed-steel-market">https://www.datamintelligence.com/buy-now-page?report=high-speed-steel-market</a>

# **Key Developments**

- In July 2023, Syntagma Capital acquired Erasteel, Eramet SA's high-speed steel and recycling operation.
- In April 2022, JFE Steel Corporation and ThyssenKrupp Steel Europe developed new highstrength steel sheets (980 and 1180 MPa) for cold forming vehicle frame components.

Why Choose This High Speed Steel Market Report?

- Latest Data & Forecasts: In-depth, up-to-date analysis through 2032
- Regulatory Intelligence: Actionable insights on key policies
- Competitive Benchmarking: Evaluate strategies of major and emerging players
- Emerging Market Coverage: Special focus on North America, South America, Europe, Asia-Pacific and Middle East and Africa.
- Actionable Strategies: Identify opportunities, mitigate risk and maximize ROI
- Expert Analysis: Research led by industry specialists with proven track records

Empower your business to stay ahead of regulatory shifts, market disruption and climate-driven trends. Request your sample or full report today.

Get Corporate Access to Live High Speed Steel Industry Intelligence Database: <a href="https://www.datamintelligence.com/reports-subscription">https://www.datamintelligence.com/reports-subscription</a>

## **Related Reports:**

Global <u>Green Steel Market</u> reached US\$ 201.3 million in 2022 and is expected to reach US\$ 140,435.7 million by 2031, growing with a CAGR of 126.7% during the forecast period 2024-2031.

The <u>ultra-high strength steel market</u> is estimated to grow at a CAGR of 7.3% during the forecast period (2025-20312) from its current value of US\$ 16,527 million in 2024 to reach a value of US\$ 26,999.19 million in 2031.

Sai Kumar
DataM Intelligence 4market Research LLP
+1 877-441-4866
sai.k@datamintelligence.com
Visit us on social media:
LinkedIn

Χ

This press release can be viewed online at: https://www.einpresswire.com/article/852388514

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.