

Smart Manufacturing Industry Report 2025-2032 | Industrial IoT & Robotics Growth

Smart Manufacturing Industry Growth, Market Size & Competitive Landscape 2025-2032

AUSTIN, TX, UNITED STATES, November 28, 2025 /EINPresswire.com/ -- Market Size and Growth

According to DataM Intelligence, the [Smart Manufacturing Market](#) Size is growing from USD 378.5 billion in 2024 to USD 1,095.7 billion by 2032, registering a strong CAGR of 15.4% during 2025–2032.



The rapid adoption of AI-powered automation, IoT-enabled factory operations, digital twins, industrial robotics, predictive maintenance, and cloud manufacturing platforms is accelerating the transition from traditional production to highly connected and autonomous factories.



Smart Manufacturing Market Forecast in United States | AI, Robotics & Industry 4.0 Insights 2024-2031”

DataM Intelligence 4Market Research LLP

Smart manufacturing minimizes downtime, optimizes energy consumption, reduces manual errors, and increases production capacity - reshaping the global industrial ecosystem.

Get a Free Sample PDF Of This Report (Get Higher Priority for Corporate Email ID):-

<https://www.datamintelligence.com/download-sample/smart-manufacturing-market>

Growth Drivers

□ Over 2.1 million industrial robots were installed globally in 2024, driving growth in autonomous and collaborative manufacturing lines.

- Global industrial downtime losses surpassed USD 140 billion in 2024, boosting demand for predictive maintenance and monitoring solutions.
- 48% of manufacturers adopted IIoT and digital twins in 2024, enabling real-time simulation, predictive modeling, and throughput optimization.
- 5G-enabled manufacturing networks are projected to cover 62% of global factories by 2030, facilitating latency-free machine-to-machine communication.
- Sustainability and energy-efficiency mandates in the EU, US, Japan, and China are accelerating smart energy monitoring and carbon-intelligent operations.

Market Segmentation Analysis

By Component

Solutions (IIoT Platforms, Robotics, MES, Digital Twins) dominate with 72% share in 2024 (USD 265B) and are projected to surge to USD 780B by 2032, driven by large-scale automation and digital factory deployments.

Services (Integration, Consulting, Managed Services) account for 28% share in 2024 (USD 103B) and are expected to reach USD 305B by 2032 as manufacturers adopt end-to-end smart transformation support.

By Technology

1. Industrial IoT generated USD 110B in 2024 and will climb to USD 350B by 2032, fueled by connected assets and predictive intelligence.
2. Industrial Robotics was valued at USD 93B in 2024 and will rise to USD 289B by 2032, supported by rising automation in assembly and material handling.
3. Digital Twin & Simulation reached USD 46B in 2024 and is anticipated to hit USD 160B by 2032, accelerating virtual prototyping and performance modeling.
4. Cloud Manufacturing accounted for USD 39B in 2024 and will grow to USD 142B by 2032, driven by scalable production and remote factory management.
5. Additive Manufacturing (3D Printing) generated USD 23B in 2024 and is projected to reach USD 82B by 2032, driven by on-demand and lightweight production.
6. AI & Machine Vision recorded USD 57B in 2024 and will expand to USD 162B by 2032, powered by autonomous defect detection and intelligent decision-making.

By Industry

1. Automotive led with 22% share in 2024, unlocking USD 235B opportunity by 2032 with EV manufacturing and smart assembly lines.
2. Electrical & Electronics held 18% share in 2024, reaching USD 190B by 2032 due to automated semiconductor and PCB production.
3. Food & Beverages captured 14% share in 2024, advancing to USD 138B by 2032 through hygiene-driven robotics and smart quality systems.
4. Pharmaceuticals & Biotech represented 11% share in 2024, scaling to USD 120B by 2032 with automation in biologics and precision packaging.
5. Aerospace & Defense accounted for 10% share in 2024, expected to reach USD 108B by 2032 via high-precision digital manufacturing and inspection.
6. Chemicals & Materials held 9% share in 2024, projecting USD 92B by 2032 as plants transition to predictive and autonomous operations.
7. Energy & Utilities captured 8% share in 2024, expanding to USD 85B by 2032 driven by smart grid automation and asset monitoring.
8. Others contributed 8% share in 2024, estimated to hit USD 82B by 2032 through cross-industry smart production adoption.

Request for Customized Sample Report as per Your Business Requirement:

<https://www.datamintelligence.com/customize/smart-manufacturing-market>

Regional Insights

United States

The U.S. smart manufacturing market was USD 109.6B in 2024 and will reach USD 332.4B by 2032, expanding at 14.6% CAGR.

US CHIPS & Science Act allocated USD 52B to build smart semiconductor factories.

Over 65% of automotive plants use AI-powered robotics and digital twins.

IIoT adoption among mid-size manufacturers increased 2.3× since 2021.

China

Valued at USD 87.1B in 2024 □ USD 281.7B by 2032 at 15.2% CAGR.
Smart factory investments supported by Made in China 2025.

Largest global installations of industrial robots and 5G-enabled factories.

Germany

The German market reached USD 41.6B in 2024 □ USD 115.4B by 2032 at 13.5% CAGR.
Industry 4.0 roadmap leading automation of automotive, machinery & chemicals sectors.

SAP, Siemens & Bosch driving integration of cloud and industrial AI.

Japan

Market reached USD 32.8B in 2024 □ USD 90.2B by 2032 at 13.8% CAGR.
Heavy investments in cobots, autonomous logistics, and predictive maintenance.

Digital twin adoption in electronics grew 61% YoY.

Key Players

The Smart Manufacturing market is moderately fragmented, comprising industrial automation leaders, AI manufacturing vendors, and robotics innovators focusing on navigation accuracy, operational safety, and energy efficiency.

Global Leaders

1. Siemens AG
2. Rockwell Automation
3. Schneider Electric
4. Honeywell
5. SAP
6. IBM

Tech & Robotics Innovators

1. ABB Robotics
2. Fanuc Corp
3. Universal Robots
4. Yokogawa Electric
5. Tech & Robotics Innovators
6. NVIDIA

Key Highlights

- Siemens generated USD 18.7B from digital industries in 2024, driven by industrial IoT and simulation.
- ABB installed 87,000+ industrial robots globally in 2024, 42% into automotive plants.
- NVIDIA AI-enabled factory platforms adopted by >850 OEMs and Tier-1 manufacturers.
- SAP Digital Twin Suite reached 33% YoY adoption among discrete manufacturers.

Recent Developments

- Siemens launched its Xcelerator AI platform to accelerate autonomous and self-optimizing smart factories (May 2025).
- ABB inaugurated a robotics mega-factory in Shanghai to scale global production of next-gen industrial robots (April 2025).
- Rockwell & Microsoft jointly introduced a cloud-native MES platform enabling predictive and real-time manufacturing insights (March 2025).
- Fanuc released 7th-generation collaborative robots designed for safer, more precise human-robot interaction in factories (January 2025).
- Honeywell deployed an AI-driven energy optimization system supporting carbon-neutral and sustainability-focused smart manufacturing (December 2024).

Market Outlook & Opportunities

- AI-based autonomous factories to contribute more than USD 450B revenue by 2032
- Digital twins expected to reduce industrial downtime by 55% by 2030
- 5G-enabled manufacturing will unlock USD 210B in productivity value by 2032
- Cobots to account for 35% of new robot installations by 2032

Buy This Report with Year-End Offer (Buy 1 report: Get 30% OFF | Buy 2 reports: Get 50% OFF each! Limited time offer): <https://www.datamintelligence.com/buy-now-page?report=smart-manufacturing-market>

Conclusion

The Global Smart Manufacturing Market is entering a new era of hyper-automation, Led by AI,

robotics, IIoT, edge computing, and digital twins, manufacturers are shifting from reactive operations to predictive, self-optimizing, and connected production ecosystems.

According to DataM Intelligence, global leaders including Siemens, ABB, Rockwell Automation, IBM, Schneider Electric, and SAP together with robotics innovators like Fanuc and Universal Robots are shaping the future of industrial autonomy.

As sustainability regulations tighten, supply chains digitize, and skilled labor shortages increase, Smart Manufacturing will remain the backbone of industrial competitiveness through 2032.

Related Reports:

[Manufacturing Predictive Analytics Market](#)

[Global Manufacturing Execution Systems Market](#)

Sai Kiran

DataM Intelligence 4market Research LLP

+1 877-441-4866

sai.k@datamintelligence.com

Visit us on social media:

[LinkedIn](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/870924164>

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.