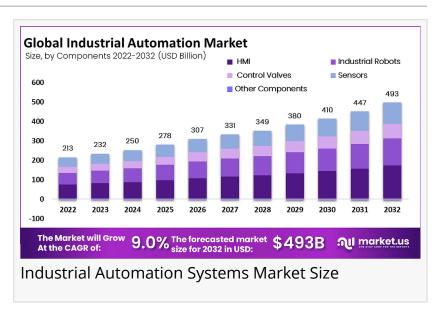


# Industrial Automation Systems Market USD 493 billion by 2032 at a 9.0% CAGR, Region at Accounting for 34.5%

Regional Growth: Asia-Pacific's 34.5% market share is fueled by automation adoption in manufacturing sectors like automotive and electronics...

NEW YORK, NY, UNITED STATES, February 12, 2025 /EINPresswire.com/ -- The Industrial Automation Systems Market is evolving rapidly, projected to expand from USD 232 billion in 2023 to USD 493 billion by 2032 at a 9.0% CAGR. This growth reflects the increasing adoption of advanced technologies like Industry 4.0, IoT, and



Al across various sectors including automotive, food and beverage, and electronics.

Key components such as Programmable Logic Controllers (PLCs), Distributed Control Systems

# ٢٢

The Distributed Control Systems (DCS) sub-segment led the control systems market with a 34% share in 2022 due to increasing IIoT adoption..."

Tajammul Pangarkar

(DCS), Supervisory Control and Data Acquisition (SCADA) systems, human-machine interfaces (HMIs), and <u>industrial</u> <u>robots</u> are central to this evolution, offering enhancements in efficiency, precision, and flexibility.

Asia-Pacific, holding a 34.5% market share, leads this trend

due to swift industrialization and robust automation initiatives in countries like China and Japan. Meanwhile, North America and Europe maintain significant roles, driven by advanced technological adoption and substantial investments.

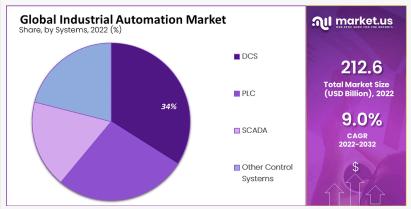
The drive towards modernization and increasing competition necessitates streamlined

manufacturing processes and reduced error margins, fueling further automation.

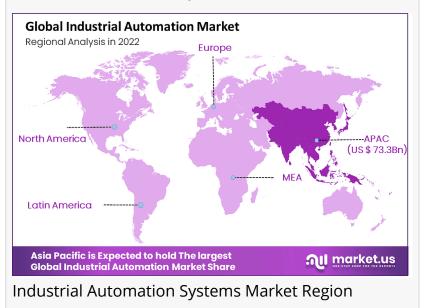
The ongoing shift towards smart factories highlights the potential and continuous demand for these technologies, promising extensive market growth as industries strive to stay competitive through improved operational capacities. Government incentives and investments further bolster this progress, ensuring alignment with smart manufacturing strategies.

### Key Takeaways

The Industrial Automation Systems Market is projected to be worth approximately USD 493 billion by 2032, growing at a CAGR of 9.0%. Industrial robots are key components due to their efficiency in manufacturing.



Industrial Automation Systems Market Share



Asia-Pacific, with a 34.5% market share,

leads in regional growth driven by automation.

Industry 4.0's adoption, especially in manufacturing, offers substantial market growth potential. High costs and skill gaps are key restraints, particularly for SMEs.

## 

#### **Experts Review**

The global industrial automation market benefits significantly from government incentives targeting technological innovation and efficiency improvements. Initiatives focus on adopting AI, robotics, and smart manufacturing systems to enhance competitiveness, particularly in sectors like automotive and healthcare.

These incentives lower barriers to smarter, more sustainable industrial practices. At the same time, investment opportunities abound as digital transformation becomes critical. However, high initial technology costs and skills shortages present risks, particularly in small-to-medium

enterprises. Addressing these challenges involves targeted investments in training and technology subsidies. Consumer awareness of automation's benefits increases, encouraging further investment as companies strive to meet the demand for high-quality, innovative products.

The impact of technology is profound, driving efficiency and reducing errors in manufacturing processes. Regulatory environments evolve alongside these advancements, with an emphasis on safety, data privacy, and <u>cybersecurity</u>, essential for maintaining trust and facilitating smooth integration of new technologies.

Regulatory frameworks support industry growth by establishing standards that spur technological advancements and ensure safe, effective use. The promise of automation is clear: more efficient, flexible manufacturing that meets the demands of a competitive market while safeguarding human roles and improving operational sustainability.

#### **Report Segmentation**

The Industrial Automation Systems Market is segmented by components, control systems, and end-user industries. Components vital to this market include Human-Machine Interfaces (HMI), Industrial Robots, Control Valves, and Sensors. Among these, industrial robots dominate due to their pivotal role in optimizing speed and efficiency in manufacturing processes. Control systems, crucial for operational management, are categorized into Distributed Control Systems (DCS), Programmable Logic Controllers (PLC), and Supervisory Control and Data Acquisition (SCADA).

The DCS segment leads with 34% of the market share, driven by IIoT integration that enhances operational efficiency and output. SCADA systems also show high growth potential, expected to expand significantly. For end-user industries, manufacturing maintains the largest market share, reflecting the trend toward automated production to curtail errors and boost precision.

The automotive and healthcare industries follow closely, leveraging automation for enhanced productivity and cost efficiency. The food and beverage, energy and power, and oil and gas sectors similarly benefit from automation advancements, ensuring processes meet high industry standards. Each segment plays a critical role in advancing the market's growth, emphasizing the transformative nature of automation technologies across diverse industrial environments.

Key Market Segments

By Components HMI Industrial Robots Control Valves Sensors Other Components

By Control Systems DCS PLC SCADA Other Control Systems

By End-User Industry Oil and Gas Automotive Healthcare Food and Beverages Chemicals Energy and Power Manufacturing Other End-User Industries

Drivers, Restraints, Challenges, and Opportunities

The Industrial Automation Systems Market is driven by the integration of Industry 4.0, which encompasses cyber-physical systems, IoT, and cloud computing to enhance efficiency and productivity. These advancements streamline processes, reduce human error, and meet specialized customer demands, making them indispensable in competitive markets. The deployment of AI and real-time data solutions further propels market growth. However, high initial setup costs and skills shortages present significant restraints, especially for SMEs. The complexity of advanced technologies and the need for specialized expertise demand greater investment in training and support infrastructures.

Meanwhile, challenges like interoperability between devices and cybersecurity threats require robust solutions to ensure seamless communication and secure operations. Opportunities arise from the heightened demand for safety compliance, machinery, and worker protection, driving the adoption of automation systems that adhere to rigorous safety standards. This necessity fosters innovation, particularly in Al-driven preventive systems and compliance-ready technologies. As industries seek efficient, reliable processes, the market is poised for continued expansion, supported by both technological evolution and strategic investments aiding seamless integration and operational enhancement.

#### Key Player Analysis

In the competitive landscape of industrial automation, key players such as Siemens AG, ABB Ltd., and Rockwell Automation, Inc. maintain a dominant presence. These companies leverage extensive product portfolios and innovation to offer comprehensive automation solutions. Siemens excels through integration of AI into industrial processes, particularly via its MindSphere platform, positioning itself as a leader in digital transformation. ABB focuses on expanding its robotics and automation offerings, emphasizing collaborative robots and AI solutions that enhance productivity and efficiency.

Rockwell Automation capitalizes on its advanced control systems and software solutions, driving innovation with IoT and AI technologies, particularly its FactoryTalk suite. Mitsubishi Electric and Schneider Electric complement this scenario with energy-efficient automation solutions, focusing on factory automation and smart manufacturing capabilities. These market leaders continually invest in next-gen technologies, strategic acquisitions, and global partnerships to strengthen their market positions, meeting the increasing demands for technological advancements and operational efficiency.

Top Key Players in the Market

ABB Ltd. Emerson Electric Co. Honeywell International, Inc. Kawasaki Heavy Industries, Ltd. Mitsubishi Electric Corporation OMRON Corporation Rockwell Automation, Inc. Schneider Electric SE Siemens AG Yokogawa Electric Corporation Fuji Electric Co., Ltd. Other Key Players

#### **Recent Developments**

In 2024, the industrial automation market witnessed significant developments, with key players expanding their portfolios and embracing AI and robotics innovations. Emerson's acquisition of National Instruments for \$8.2 billion underscored its focus on expanding its automation business into fast-evolving sectors like semiconductors and electronics. Rockwell Automation introduced new offerings at the ARC Industry Forum, enhancing its PlantPAx control system and launching FactoryTalk Optix and DataMosaix to facilitate better process automation and data analytics.

ABB reinforced its automation technologies with the purchase of Meshmind, focusing on AI, machine learning, and advanced vision systems to improve logistics and manufacturing solutions. It also acquired Sevensense for AI-driven 3D vision capabilities in robotics, demonstratinga commitment to AI-based innovation. These strategic moves highlight a trend towards integrating cutting-edge AI and machine learning technologies to bolster automation capabilities, positioning these companies to address evolving market demands and enhance operational efficiency.

#### Conclusion

In conclusion, the Industrial Automation Systems Market is poised for robust growth, driven by technological advancements and increasing demand for automation in various industries. Emerging technologies such as AI, IoT, and Industry 4.0 play pivotal roles in enhancing operational efficiency, precision, and sustainability.

Despite challenges like high costs and skill gaps, opportunities for investment and innovation abound, particularly in enhancing safety and compliance standards. Key industry players continue to leverage strategic partnerships and acquisitions to maintain competitiveness. As global industries strive for modernization and efficiency, the market's future looks promising and transformative.

Factoring Market - <u>https://market.us/report/factoring-market/</u> AI Data Center Market - <u>https://market.us/report/ai-data-center-market/</u> E-Commerce Platforms Market - <u>https://market.us/report/e-commerce-platforms-market/</u> BPO Business Analytics Market - <u>https://market.us/report/bpo-business-analytics-market/</u> Credit Scoring and Fraud Market - <u>https://market.us/report/credit-scoring-and-fraud-market/</u> Data Analytics in PPA Management Market - <u>https://market.us/report/data-analytics-in-ppamanagement-market/</u> Agentic AI in Law Enforcement and Surveillance Market - <u>https://market.us/report/agentic-ai-inlaw-enforcement-and-surveillance-market/</u> Predictive analytics in EdTech Market - <u>https://market.us/report/predictive-analytics-in-edtechmarket/</u> Smartphone Screen Protector Market - <u>https://market.us/report/smartphone-screen-protectormarket/</u> Digital Infrastructure Market - <u>https://market.us/report/digital-infrastructure-market/</u>

Lawrence John Prudour +91 91308 55334 Lawrence@prudour.com This press release can be viewed online at: https://www.einpresswire.com/article/785355383

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.