

# World Robotics Industrial Robots 2025



Statistics, Market Analysis, Forecasts and Case Studies



# World *Robotics* Industrial Robots

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## 2025

### World Robotics 2025 – Industrial Robots

Produced by VDMA Services GmbH, Lyoner Str. 18, 60528 Frankfurt, Germany.

The robot statistics are based on consolidated world data reported by robot suppliers as well as on the statistics and support of the national robotics associations of North America (A3), Spain (AER), United Kingdom (BARA), People's Republic of China (CRIA), Denmark (DIRA), Japan (JARA), Republic of Korea (KAR), Italy (SIRI), Sweden (SWIRA) and Chinese Tapei (TAIROA).

The cover and the editorial are sponsored by FANUC Corporation.

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We express our most sincere gratitude to all partners!

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Suggested citation: Müller, Christopher: World Robotics 2025 – Industrial Robots, IFR Statistical Department, VDMA Services GmbH, Frankfurt am Main, Germany, 2025.

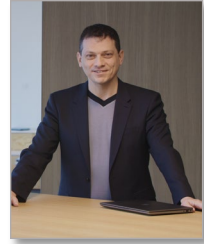
Short citation: World Robotics 2025 – Industrial Robots

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ISBN 978-3-8163-0771-6

## Editorial

By: Marco Ghirardello, FANUC Europe President & CEO



### Collaboration as the Key to Navigating Transformation

The past year presented formidable challenges for companies across the globe. Amid persistent geopolitical tensions, renewed tariff disputes, and macroeconomic volatility, business confidence waned, and investment decisions became more cautious. At the same time, supply chain disruptions once again came to the forefront. For companies, the ability to adapt quickly to short-term changes in demand has become not just a competitive advantage, but a necessity for survival.

In parallel, megatrends that have long shaped the industrial landscape, such as demographic shifts, skilled labour shortages, and increasing sustainability pressures, continued to intensify. These structural issues have compelled companies to rethink their business models and re-evaluate their operational priorities. As a result, automation is no longer viewed solely as a cost-cutting measure or efficiency enhancer; it is now a strategic lever for long-term resilience and innovation.

One key development in this context is the growing demand for automation solutions that are not only effective but also user-friendly and immediately applicable. Companies are no longer content with abstract, high-concept automation strategies. Instead, they seek tangible, turnkey solutions that can be deployed quickly and easily, especially by teams without extensive technical backgrounds.

Importantly, this is enabling a broader set of players to participate, especially small and medium-sized enterprises (SMEs). Collaborative robots, or cobots, in particular are supporting this democratisation of automation. Designed to work safely alongside humans, cobots offer a more accessible entry point into robotics. Their flexibility, ease of use, and compact footprint make them particularly attractive for SMEs seeking to improve productivity without overhauling their entire production infrastructure.

For many of these companies, their first experiences with cobots are proving transformational. They not only achieve immediate gains in efficiency and quality but also accelerate their internal learning curve. Over time, this growing familiarity with robotics opens up new automation opportunities across their operations, unlocking higher competitiveness, better resource utilisation, and an improved total cost of ownership. In essence, cobots are serving as a gateway to a broader and more sustainable automation journey.

This shift is also expanding the scope of industries embracing robotics. Once confined mainly to the automotive, electronics, and heavy engineering sectors, robots are now making significant inroads into areas such as retail, pharmaceuticals, and the food



industry. These are domains characterized by high variability, individualized customer demands, and expectations for 24/7 service, conditions where flexible automation thrives.

In practical terms, cobots can take over repetitive or time-sensitive tasks, working alongside humans during the day and independently during night or weekend shifts. For example, in bakeries, hospital kitchens, or convenience food outlets, robots can prepare fresh rolls, sandwiches, or meal kits around the clock. These use cases which have already been showcased by FANUC at major trade shows have captured considerable attention from both media and industry.



Figure 1: Robots handling plastic bags for sterilisation. Image credit: FANUC.

Adding to this momentum is the rapid advancement of artificial intelligence (AI). AI-driven tools are further improving ease of use, ease of integration and ease of automation. Here the automation domain sees a rapid development curve for facilitating complex automation solutions, automation of robot programming or new skills deployed on robotic systems. Alongside digital twins, AI is poised to be a major accelerator of robotics adoption across diverse sectors.

However, cobots and AI alone are not enough to meet the multifaceted challenges faced by today's industries. A third and equally important trend is gaining traction: the move toward stronger partnerships and open ecosystems. In the past, major robotics

companies often focused on closed, proprietary systems which locked customers into single-vendor solutions. While this approach offered consistency, it limited flexibility and interoperability.



Figure 2: Cobots place cold cuts on baguettes. Image credit: FANUC.

Today, the landscape is changing. There is a growing recognition that no single company can solve the complex automation challenges of modern industry alone. Collaboration is becoming a core strategy. Robotics vendors are now designing products with open interfaces and industry standards. For instance, FANUC's upcoming robot controller R-50iA will support platforms like ROS2 and the Smart Robotics Communication Interface (SRCI), and Python script execution, enabling easier integration and giving users the freedom to work within their preferred environments.



This openness is creating fertile ground for new alliances—between hardware manufacturers, software developers, system integrators, startups, and end-users. These partnerships extend beyond technical compatibility; they bring together complementary expertise, domain knowledge, and market access. The result is more holistic, effective, and scalable automation solutions tailored to real-world needs.

In conclusion, 2024 has marked a pivotal turning point in industrial automation. As companies navigate an increasingly complex landscape, the combination of collaborative robotics, AI innovation, and cross-sector partnerships is paving the way for more accessible, adaptable, and impactful automation. The future of robotics lies not just in technological breakthroughs, but in the strength of the ecosystems we build together.

This collaborative expertise is crucial for overcoming skills shortages. Even with cobots, training workers is essential to maximize automation investment returns. Many robot manufacturers support this by offering training programs and partnering with educational institutions to nurture the next generation of robotics enthusiasts. Over time, these efforts contribute to a robust robot ecosystem where suppliers, integrators, startups, and educational institutions collaboratively develop the automation solutions of tomorrow.