

## U.S. Lags China in Factory Robot Deployment by 5 to 1 Ratio

- World Robotics 2025 Report by International Federation of Robotics released

Frankfurt, September 25<sup>th</sup>, 2025 — **The new World Robotics report recorded 393,700 industrial robots working in US factories - an increase of 3% year-on-year. Annual installations reached 34,200 units in 2024 - down 9%, but 30% higher compared to ten years ago. Nevertheless, the US has growth potential: China, the world's largest market for industrial robots, has five times more operational stock than the US.**

“The **United States** is highly automated running the third-largest stock of industrial robots worldwide, behind only Japan and China,” says Takayuki Ito, president of the International Federation of Robotics. “However, a comparison of the US and China reveals the enormous automation potential of the world's largest economy by GDP.”

With annual installations ranging from 26,200 to 40,400 units, the United States is in line with other leading adopters, such as South Korea, Germany, and Japan. But China installed 295,000 industrial robots in 2024, which is almost nine times more than the United States.

A long-term perspective confirms the automation gap: In 2024, China had around five times more factory robots in use (2,027,200) than the US (393,700 units). This development is based on China's national robotics strategy released in December 2021, with the aim of enhancing competitiveness.

### National Robotics strategy

The Association for Advancing Automation (A3) strongly advocates for a national robotics strategy in the United States. Its comprehensive vision outline, released in 2025, sets out key policy recommendations for maintaining global competitiveness. This must take into account the structural differences, such as the fact that most U.S. robot hardware is imported from Japan and Europe. The situation is different in China, where 57% of the market is served by domestic manufacturers.

In addition, Chinese manufacturers are leading the way in the adoption of robotics automation in new customer industries, extending the reach of robotics beyond the traditional domains of the automotive, metal/machinery, and electro/electronics sectors.

### U.S. Customer Industries

In the US, the traditional customer industry **automotive** remains by far the largest customer market, accounting for 40% of total US installations in 2024: Sales rose by 11% to 13,600 units. On a global scale, the United States has the second largest production volume of cars and light vehicles, following China.

The **metal and machinery** industry installed 3,500 units – down 15%. The US **electrical/electronics** industry went down by 23% to 2,800 units newly installed. Robot installations in the **food and beverage** industry gained 21% to 2,200 units in 2024.

## Canada and Mexico

**In Canada**, robot demand from the automotive industry went down 28% to 1,800 units, accounting for 47% of total installations in 2024. Installations across all industries declined by 12% to 3,800 units. Canada has close ties to the US economy and is thus strongly affected by US tariffs. The automotive industry has cancelled many major investment projects due to policy uncertainty. Robot installations in Canada are, therefore, expected to further decline.

**In Mexico**, demand from the **automotive industry** declined by 11% to 3,500 units in 2024. This segment accounts for 63% of total installations. Installations across all industries declined by 4% to 5,600 units, continuing the downswing of the previous year.

## Outlook

Uncertainty and trade tensions will be a burden for the **US robotics market** in the short term. In the long run, reshoring production and labor scarcity will provide excellent opportunities for robotics and the overall expectation is positive. Robot installations are expected to grow in 2025 and beyond.

## Downloads

Press releases on the global and selected local markets like Europe, China, Americas, India and Germany, market presentation and graphs are available as download.

<https://ifr.org/ifr-press-releases/global-robot-demand-in-factories-doubles-over-10-years>

## About IFR

The International Federation of Robotics is the voice of the global robotics industry. IFR represents national robot associations, academia, and manufacturers of industrial and service robots from over twenty countries: [www.ifr.org](http://www.ifr.org)

The IFR Statistical Department provides data for two annual robotics studies:

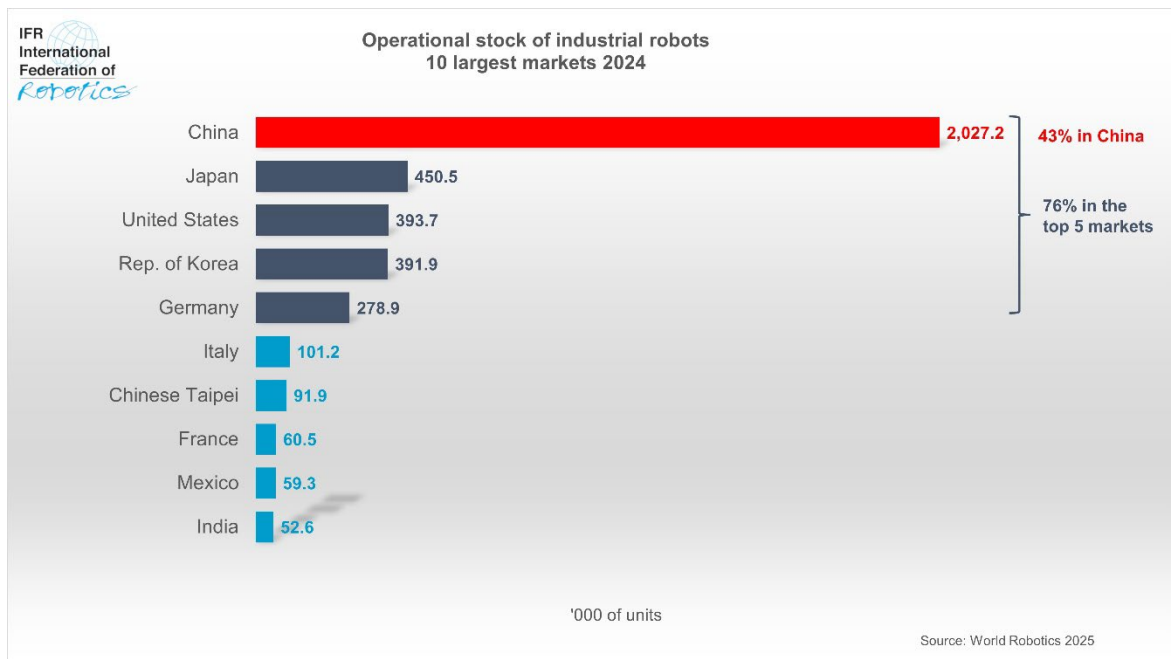
**World Robotics - Industrial Robots:** This unique report provides global statistics on industrial robots in standardized tables and enables national comparisons to be made. It presents statistical data for around 40 countries broken down into areas of application, customer industries, types of robots and other technical and economic aspects. Production, export and import data is listed for selected countries. It also offers robot density, i.e. the number of robots per 10,000 employees, as a measure for the degree of automation.

**World Robotics - Service Robots:** This unique report describes marketable products, tasks, challenges and new developments by [service robots](#) application. The report includes the results of the annual IFR service robot survey on global sales of professional and consumer service robots and an industry structure analysis including a full list of all service robot producers known to the IFR. The study is jointly prepared with the robotics experts of Fraunhofer IPA, Stuttgart.

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