

## Record 435,000 robots now working in Japan's factories

Frankfurt, September 24<sup>th</sup>, 2024 — The new World Robotics report recorded **435,299 industrial robots working in Japan's factories - an increase of 5%. Annual installations reached 46,106 units in 2023 - down 9%, but still second to China as the largest market for industrial robots worldwide.**

"Japan is one of the most robotized countries in the world," says Marina Bill, President of the International Federation of Robotics. "The operational stock rose by 6% on average per year CAGR from 2018 to 2023, ranking second globally."

### Exporting Robots

Japan is a world leading robot manufacturing country accounting for 38% of global robot production. Japanese exports reached 160,801 units in 2023. This was 23% down on the peak of 207,737 units in 2022. The export ratio was 78% in 2023, which was well within the usual range of 72% to 81%.

### Customer Industries

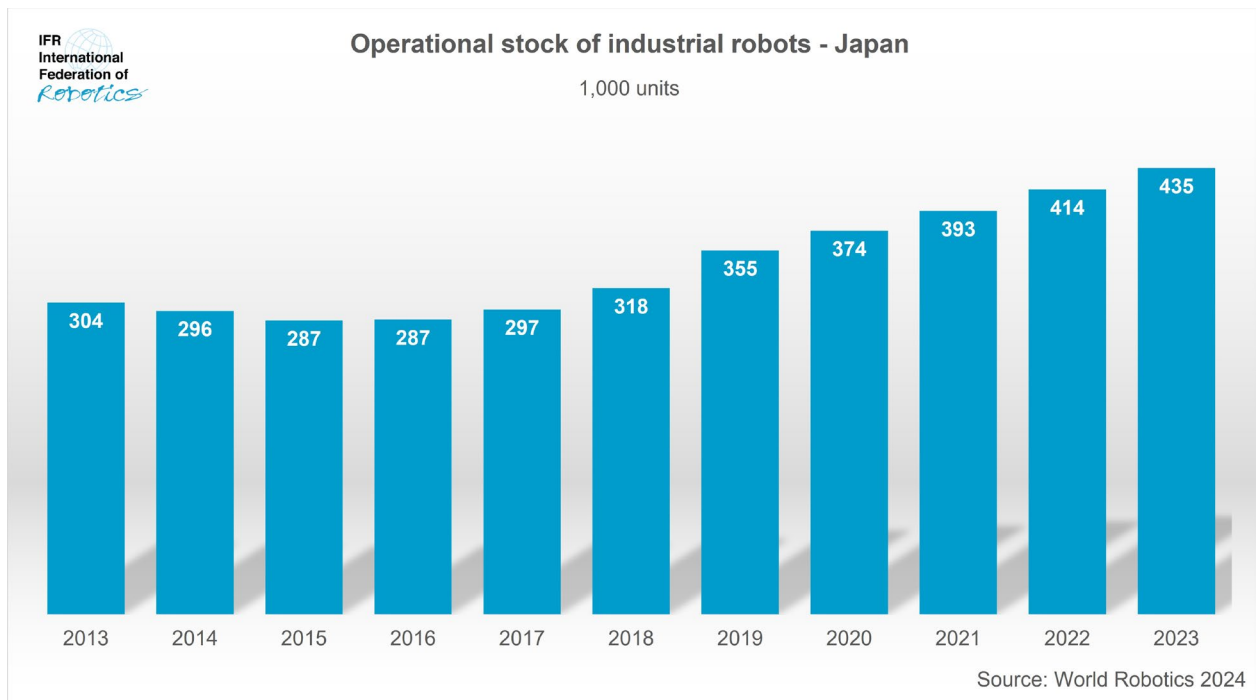
Demand from the **electrical/electronics industry** hit 14,692 units in 2023. Installations follow a two-year cyclical pattern: There was a cyclical upswing in 2022 and a fall of 20% in 2023. This segment had the largest stock of robots: 143,768 units were 4% more than the previous year and 33% of Japan's operational stock in 2023.

The **automotive industry** installed 11,881 units in 2023, down 7%. This accounted for 26% of total installations in Japan. The car industry's **operational stock** grew by 6% on average per year since 2018 to 132,766 units – up 3% in 2023. That was 30% of the total operational stock.

In the general industry, the **metal and machinery industry** is the largest customer, installing 7,854 units – down 4% in 2023. This was 17% of the total installations in Japan. The segment held the third largest **operational stock**: 64,915 units – up 10%: This represented 15% of Japan's stock in 2023 with an average annual growth rate of 11% since 2018.

### Outlook

The OECD expects the Japanese GDP to grow by 0.5% in 2024 and by 1.1% in 2025. The Japanese automotive industry is in the middle of a restructuring process to adapt to alternative powertrains. Most car manufacturers intend to expand their portfolio of battery and fuel cell electric vehicles. In addition, Japanese manufacturers are developing hydrogen-fueled combustion engines. This diversified portfolio will require the appropriate production technology. Demand for robots is expected to remain stagnant in 2024 but recover in 2025 and the following years to medium and upper single-digit rates. In the long run, demographic change will require the adoption of automation technology in many branches of the Japanese economy, providing excellent long-term perspectives.



**Industrial robots working in Japan’s factories continue to grow © World Robotics 2024**

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**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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**Press contact**  
PRESS OFFICER  
International Federation of Robotics  
Carsten Heer  
phone +49 (0) 40 822 44 284  
E-Mail: [press@ifr.org](mailto:press@ifr.org)