



China snaps up more than one in four industrial robots as sales hit record

Michael Pooler – London
Financial Times

The accelerating pace of automation on factory floors saw a double-digit rise in sales of industrial robots to a record in 2015.



The surge was driven by companies installing machines not only in advanced countries but emerging economies, according to research by the International Federation of Robotics.

It found that 248,000 units were sold last year, an increase of 12 per cent, with more than one in four going to China. Once the manual labour workshop of the world, the country is the largest buyer of industrial robots.

Robots have sparked fears that jobs will be destroyed as more processes become automated without the need for human intervention.

But Per Vegard Nersteth, head of robotics for ABB, the engineering group, said one factor behind their proliferation was a lack of willing labour for certain tasks.

“People today don’t want to do dull, dirty, dangerous and delicate jobs any more,” he said. “Many companies, when the older generation of factory workers retire, really struggle to get hold of people who want to take up those jobs.”

Advances in sensors, hydraulics, and artificial intelligence are helping make robots more flexible, precise and autonomous, enabling them to be used in a wider range of manufacturing applications.

This is shown by the arrival of co-robotics, whereby robots are taken out of cages to work safely alongside humans.

The greatest demand for robots last year came from the automotive industry, accounting for more than a third of sales, followed by electrical and electronics producers, according to IFR data.

The metals industry posted the sharpest growth.

“It’s all about economics,” Hal Sirkin, of Boston Consulting Group, said. “The cost of the systems is falling and the capabilities are rising. We have at least 15 to 20 years where robotics will continue to expand.”

To Meet Demand, CWM Expands: Meet Our FANUC Robot Family

Chicago White Metal continues to grow at 10% per year. In order to meet the increased customer demand, the CWM team continually looks for innovative ways to improve efficiency and maintain our high standards for quality. With that in mind, it was time to add yet another new robot member to the team.

This robot, the **FANUC M10iA**, will be used to load/unload a CNC mill with one of CWM’s higher volume parts for one of CWM’s top customers. This robot has the ability to work with a number of different part numbers and utilizes camera-based vision systems to verify presence and location of holes, orient the part, load and unload the parts on the fixture, install special clamping inserts, confirm the clamping is correct, and sequence the input and output conveyors. This robot’s flexibility could allow it to be used in a similar fashion on other projects.



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The addition of the robot allows the operator to shift focus to other tasks, including cosmetic inspection, gauging, or tending other machines. Several hours’ worth of machined product can be loaded/unloaded in seconds onto the side-by-side input/output conveyors that are integrated into the cell and tied into the robot’s logic.

The system allows the robot/CNC cell to work continuously resulting in a steady flow of product. The robot incorporates several camera-based inspection steps, using a 2D vision verification system which simulates “eyes”, further assuring that the parts are going to meet CWM’s and the customer’s quality standards.

The FANUC M10iA is set for installation by the end of July 2016.

CWM employs a similar **FANUC M710** series robot in the die casting department, where it extracts hot castings from the die casting machine and places them gently into a quench tank, and then onto a conveyor. This greatly reduces the chance that a part will be damaged if it were allowed to be ejected from the die and onto a conveyor directly.

