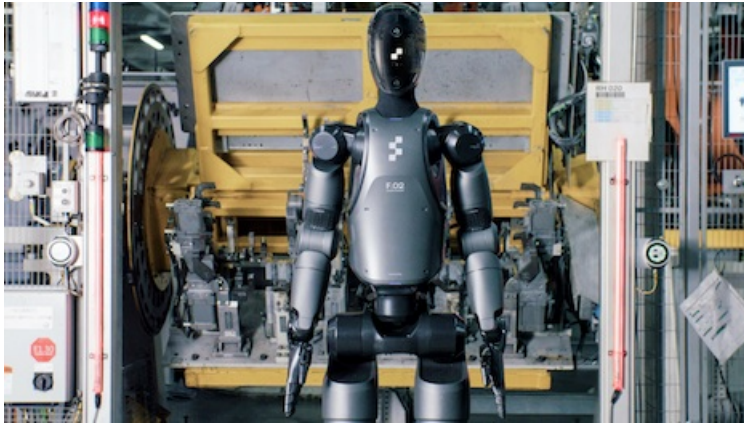


AUTOMOTIVE

After successful humanoid robot run, BMW officially introduces 'Figure 02'

August 8, 2024



Luxury manufacturing could be simplified in the coming years with the use of new technology. Image credit: BMW

By ZACH JAMES

German automaker BMW is putting its vision of the future into practice for the first time.

The manufacturer announced this week that it has been testing humanoid robots on its production line in the BMW Group Plant Spartanburg's body shop. The achievement marks another technological leap in the automotive space, following other high-end motor companies pushing for innovation this year, both inside of the car and in the processes that go into producing the machines.

"The developments in the field of robotics are very promising," said Milan Nedeljkovi, a member of the board of management for production at BMW AG, in a statement.

"With an early test operation, we are now determining possible applications for humanoid robots in production," Mr. Nedeljkovi said. "We want to accompany this technology from development to industrialization."

Building the future

In the test, BMW examined the Figure 02, the latest creation of California-based robotics company Figure AI.

During the multi-week experiment, Figure 02 was able to complete production tasks that could be "ergonomically awkward and tiring" for employees to complete multiple times throughout a workday, such as inserting sheet metal into mechanical fixtures. The automaker is investigating any other potential use cases for the humanoid machine in the South Carolina-based factory as it looks to become more sustainable and efficient in everyday production.

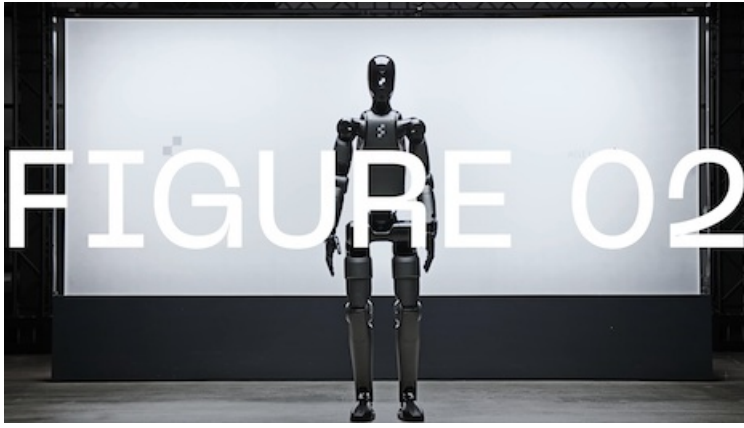
BMW showcases Figure 02's current capabilities

BMW announced the testing on Aug. 6, the same day that Figure 02 was formally unveiled to the public. Artificial intelligence powers the robot, with the machine operating autonomously to complete its assigned task.

Each unit is outfitted with six cameras, multiple microphones, sensors, a high-performance battery and hands with 16 degrees of motion as well as an amount of strength equivalent to that of a human worker.

"We are excited to unveil Figure 02, our second-generation humanoid robot, which recently completed successful testing at the BMW Group Plant Spartanburg," said Brett Adcock, founder and CEO of Figure, in a statement.

"Figure 02 has significant technical advancements, which enable the robot to perform a wide range of complex tasks fully autonomously."



The automaton can complete tasks with human-equivalent strength and precision. Image credit: BMW

According to Figure AI, Figure 02 is the most advanced humanoid robot on the market. BMW will continue to work with the tech company to collect data to improve the machine's software and optimize the training conditions for further trials.

A timetable for the deployment of Figure 02 models in the automaker's production process has not been established as of yet, with BMW Group Plant Spartanburg currently having none of the AI-powered automatons on-site.

Quantum leap

Other luxury automakers, such as Porsche, Jaguar Land Rover and Ferrari, are looking to emerging technology to improve their respective manufacturing processes.

Figure 02 coming 8/6 pic.twitter.com/lxTr9f6YKb

Figure (@Figure_robot) [August 2, 2024](#)

Earlier this year, JLR updated its manufacturing capabilities in multiple ways, opening a state-of-the-art software engineering campus in Portland, Oregon ([see story](#)) as well as expanding its use of renewable energy across its operations in the United Kingdom ([see story](#)).

Not long after, Porsche began using Apple Vision Pro augmented reality headsets to train its production line employees with hands-on, interactive tutorials ([see story](#)).

In June, Ferrari opened up its first-ever "e-building," a LEED Platinum factory that produces the automaker's entire range of powertrains while utilizing a combination of the latest robotics and machinery to streamline the process. The site will begin running off of exclusively renewable energy later this year ([see story](#)).