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A New Era of Speed, Flexibility, and Efficiency

Nurettin Geçgel, General Manager of Mitsubishi Electric Türkiye Factory Automation Systems, emphasizes that the company has achieved its 2023 targets and highlights the importance of integration in flexible production through robotics.

Mitsubishi Electric Türkiye Factory Automation Systems is introducing next-generation automation systems designed for more efficient and flexible production at the Robot Investments Summit and Exhibition. Nurettin Geçgel, General Manager of Factory Automation Systems, stated, “Today, robots have become deeply integrated into industry and are used at every stage and across all areas. We are one of the few companies that design and manufacture the entire range of factory automation products from A to Z. We offer collaborative robots, MELSEC PLCs, and AI-focused solutions. When all automation solutions are developed under one roof, integration becomes much easier. As we approach the end of 2023, we have achieved the targets we set for this year.”

Mitsubishi Electric Türkiye Factory Automation Systems is participating in the summit, held at the Istanbul Expo Center until December 23, with its “Automating the World” concept. At the stand, flexible industrial robots—including the collaborative robot (cobot) Melfa Assista, developed to reduce costs and increase reliability—along with MELSEC PLC and MELSERVO solutions are being showcased. Interactive robot demonstrations at the stand also present next-generation automation systems and solutions.

Mitsubishi Electric Turns 100

Sharing insights about the company and flexible industrial robots, Nurettin Geçgel noted: “Mitsubishi Electric was founded in 1921 and is guided by seven core principles, including trust, quality, technology, and society. Under the principle of ‘society,’ we aim to contribute to the countries in which we operate. We want everyone to move toward a more prosperous future. In this context, we teach automation to undergraduate students at 33 public universities across Türkiye. At the same time, we are a company that strictly adheres to ethical principles and respects the environment and nature. One of our core philosophies is to always strive for growth.”

Robots Are Used at Every Stage

Geçgel continued:
“Robots have become an integral part of industry. They have long been used in sectors such as painting and welding, but today they are utilized at every stage and in every field. By 2025, 50% of machines

are expected to be robotized. The number of collaborative robots working alongside humans will also increase. As Mitsubishi Electric, we are among the few companies that design and manufacture all factory automation products end to end. With our cobots, MELSEC PLCs, and AI-focused technologies, having all automation solutions from a single source allows for easier integration and enables us to respond flexibly to required production capacities and changes."

We Achieved Our 2023 Targets

Explaining that Mitsubishi Electric operates in Türkiye in two main areas—air conditioning systems and factory automation systems—Geçgel stated:
"As we conclude 2023, we have achieved the targets we set in both factory automation systems and air conditioning systems. Our primary goal is to work with companies in Türkiye with whom we can build strong partnerships. Fortunately, there are many such companies in Türkiye. Together, we manufacture and sell machines to many parts of the world, which makes us proud. At the beginning of each year, our growth target is typically 20–30%, and as of now, we have reached this target for 2023. Türkiye has reached a very strong position in machine manufacturing and has become a globally influential country in this field. As Mitsubishi Electric, we continue to support industries to the best of our ability."

Robots Enable Speed and Flexible Production
Necmi Ömerdedeoğlu, Robot, Inverter & LVS Product Manager at Mitsubishi Electric Türkiye Factory Automation Systems, commented:
"Since the Industrial Revolution, robots have been used to standardize production, save time, and reduce costs. For speed and flexible production, robots are essential. While the number, model, and features may vary depending on needs, robots have become an indispensable part of our lives and will continue to be widely used in the future—only with more integrated systems. At our stand, we are presenting robot demonstrations integrated with 5G and artificial intelligence technologies."

Adding Vision and Sensing Capabilities to Robots
Ömerdedeoğlu added:
"Robots can perform any repetitive task. We use them for picking and placing, stacking, and assembly applications. Just as humans perceive the world through five senses, we equip robots with cameras to serve as their eyes and sensors on their arms to enable them to 'feel.' In this way, we develop structures that generate solutions based on the needs of tracking and inspection systems."

Hands-Free Quality Control with VR Technology
At the exhibition, Mitsubishi Electric also introduced the new advanced model of its renewed robot teaching pendant family, the R86TB. The high-performance R86TB teaching pendant offers ease of use through its user-friendly interface, powerful core engineering software functions, and advanced data analysis tools for troubleshooting. Even in environments where a computer cannot be brought onto the shop floor, the next-generation teaching pendant supports processes from installation through maintenance, helping reduce both time and costs.

Through two interactive robot demonstrations at the exhibition, the company enables visitors to experience firsthand the latest advancements in automation and robotics. Visitors can observe a robot performing quality control inside the indoor unit of Mitsubishi Electric Climate Systems' Legendera model using an inspection sensor, while the process is monitored in a virtual environment via VR glasses—eliminating the need for a quality control specialist to be physically present at the machine.