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15 February 2018

**Mitsubishi Electric continues to inform manufacturers about the latest technologies
compatible with the 4th Industrial Revolution**

Turkey is preparing for Industry 4.0

Mitsubishi Electric drawing attention with its technologically advanced factory automation solutions, in order to inform manufacturers with Industry 4.0 continued its events organized in many provinces of Turkey with Konya. Mitsubishi Electric, which provides added value for rapid integration, productivity and efficiency with high technology and engineering power to Turkish industry, explained automation of heating, ventilation and air conditioning (HVAC) projects with e-F@ctory concept and advanced robotics technology in response to Industry 4.0. It introduced next generation products and solutions, especially Panel Solution Platform and SCADA solution, which collect automation systems under a single roof.



Mitsubishi Electric, designing digital factories that are compatible with Industry 4.0, where productivity in manufacture, energy saving and employee comfort enhance, is working to make the Turkish industry ready for the new industrial era. In this context, Mitsubishi Electric by organizing seminars in several

provinces of Turkey and discussing the latest technologies about Industry 4.0, at its next

station met with industrialists in Konya. Mitsubishi Electric, who introduced innovative technologies compatible with Industry 4.0 to industry representatives at Konya Dedeman Hotel, talked about digital factory concept e-F@ctory and advanced robot technologies. In the seminar, information about automation works of Mitsubishi Electric's heating, ventilation and air conditioning (HVAC) projects was given. SCADA solution, Panel Solution Platform and compressor solutions were also presented.

e-F@ctory, increasing speed, quality and productivity in manufacture



Information on the e-F@ctory concept, which is a response to Mitsubishi Electric's Industry 4.0, was shared in the event which brought representatives from different sectors together. The digital factory concept e-F@ctory, which has emerged as an integrated solution for building reliable and flexible manufacture systems, offers tremendous cost savings while increasing speed, quality and productivity in manufacture. With this concept, Mitsubishi Electric gives an opportunity to industrialists

to be able to set up their factories to meet all the needs of Industry 4.0. Before factory investment, it provides an opportunity to construct a virtual factory and realize the simulation of the factory and manufacture, evaluate the productivity and shape the investment in the direction of the outputs. Mitsubishi Electric uses the e-F@ctory concept in its production lines since 2003 and reflects its experience on its products and customers.

Preventing damages by determining obstacles

One of the highlights of the seminar was Mitsubishi Electric's advanced robot technology. The robot control unit of Mitsubishi Electric, acting with the awareness that the speed and convenience provided by the robots will play a greater role in the industry day by day; provides flexibility of motion control, the speed, accuracy and precision of the system. In addition, with its flexing functions, the robot arm acts as a kind of spring and is stretched according to the force. For advanced applications, Mitsubishi Electric's robots can be easily integrated with conveyor (conveyor belt) and product monitoring, force control and visibility features. The "Sensorless Collision Control" feature allows the robot to detect any obstacle in manual or automatic mode and prevent collision damage.

It is used in very high speed systems to increase productivity

The RV-F series of Mitsubishi Electric's dynamic 6-axis robot is able to imitate human arm movements and boost productivity using very high speed systems with its 0.32 second cycle times. The dual-arm structure of the 6-axis industrial robot, which can easily perform flexible figures with its dynamic structure, does not only provide added

value in terms of freedom of movement, but also offers more stability and versatility. For the RV-F series, it is not difficult to work in very confined spaces and it is no problem to install robots on walls or ceilings. Mitsubishi Electric robots range from 504 to 2.050 millimeters depending on the model, with a carrying capacity of 2 to 70 kilograms.

Automation products are under one roof



Mitsubishi Electric, which provides high value added advanced technology automation solutions to the Turkish industry, also introduced the "Panel Solution Platform" which collects innovative automation system solutions under one roof. Platform of the external cabin is produced in Turkey

offers the possibility of commissioning at short notice to industrial facilities and infrastructure projects. The "Panel Solution Platform", which enables the automation of many different processes such as fan, pump, compressor, air handling unit, mill, conveyor, crane, crusher, mixer and opening-winding applications much more practically and efficiently, with its ready solution parameters and programs, it also removes the need for additional hardware. This platform has an infrastructure that can provide a complete solution in addition to Panel Solution Platform such as PLC control system solution, low harmonic solution, brake unit and brake resistor solution, panel cooling system solution. In addition, due to its wide range of options and modular structure, it can be preferred either individually or in groups according to the needs of facilities and projects.

Time-saving SCADA Solution

Mitsubishi Electric's SCADA solution significantly reduces engineering time spent developing and configuring with wizard interfaces that can automatically create PLC and SCADA projects. It also allows for a standard structure that will facilitate ongoing maintenance of the plant during the life cycle. With MAPS (Mitsubishi Electric Adroit Process Suite), reports can be created automatically covering fields such as input/output plans, PLC and SCADA label configurations. MAPS also helps keeping project documentation up-to-date. Throughout the design phases, and even when the systems are changed or updated over time, MAPS provides uninterrupted management capability for PLC/SCADA projects and facilities according to the installed electrical documentation for the system.

About Mitsubishi Electric Corporation

With over 95 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications,

consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, *Changes for the Better*, and its environmental statement, *Eco Changes*, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,238.6 billion yen (US\$ 37.8 billion*) in the fiscal year ended March 31, 2017. For more information visit: www.MitsubishiElectric.com

* It was calculated by 1 USD = 112 Yen exchange rate announced by the Tokyo Foreign Exchange Market on March 31, 2017.

About Mitsubishi Electric's Activities in Turkey

Mitsubishi Electric's main fields of activity in Turkey are; air conditioning systems, factory automation systems, advanced robotics, CNC mechatronic systems, elevator and escalator systems and visual data systems. Mitsubishi Electric, which established an household air conditioner development and manufacturing company in April 2016 in Turkey, began production in Manisa factory in December 2017. Mitsubishi Electric, the producer of Turksat 4A and 4B satellites, which contributes to the communication and publishing infrastructure of Turkey and neighboring countries, is notable for its satellites as well as the automation technology used in the Marmaray project. For more information; tr.mitsubishielectric.com

About Mitsubishi Electric Turkey Factory Automation Systems

Mitsubishi Electric Turkey Factory Automation Systems; provide added value in terms of rapid integration, productivity, flexibility and productivity to the leading industrial companies in Turkey in various fields such as automotive, food, packaging, metal and PVC processing machines. The new industry, also called "Industry 4.0", responds with e-F@ctory, i.e. the digital factory concept. For more information; tr3a.mitsubishielectric.com