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**Mitsubishi Electric stands out with its automation solutions at MAKTEK Eurasia**

## **MACHINERY INDUSTRY MEETS MITSUBISHI ELECTRIC TECHNOLOGY**

*Mitsubishi Electric, a recognized global technology leader, exhibited new M80 and M800 series CNC control units and new generation factory automation products in MAKTEK Eurasia 2016, which is the largest manufacturing technologies exhibition in Eurasia. While Mitsubishi Electric booth became quite popular with the professionals from the industry, Mitsubishi Electric Turkey Factory Automation Systems General Manager Şevket Saraçoğlu underlined that the brand is ready to support all manufacturers that aim to increase their competitive power thanks to their high tech factory automation systems and CNC products which offer high added value.*

Known for adding value to Turkish industry with its high tech factory automation products and highly appreciated for “Station Information and Management System Project” created for Marmaray, Mitsubishi Electric attracted great attention in MAKTEK Eurasia 2016, which is the largest manufacturing technologies event in Eurasia. The brand exhibited its integrated and innovative machinery automation solutions including M80 and M800 series CNC control units during the exhibition which was held from 11<sup>th</sup> to 16<sup>th</sup> of October in TÜYAP Exhibition and Congress Centre.

**Mitsubishi Electric Turkey Factory Automation Systems General Manager Şevket Saraçoğlu** uttered his opinions about the exhibition: “Focusing on Turkey in recent years, our brand lends its globally acknowledged technological power to Turkish machinery and automation industry especially through the solutions packages created for OEM industry and collaborations with universities. Mitsubishi Electric Factory Automation Systems create added value for factories with different operations in terms of fast integration, productivity, flexibility and efficiency throughout the world. We believe Turkish industry will increasingly require high tech and energy efficient factory automation solutions as it continues to improve rapidly and we claim to be the right address for this challenging task.”

***“We are ready to support any manufacturer that aims to reinforce its competitive power”***

Indicating that Mitsubishi Electric provides leading machinery manufacturers in the world with high automation equipment, CNC products and engineering solutions, Şevket Saraçoğlu said: “MAKTEK Eurasia 2016 visitors have had the opportunity to review and explore Mitsubishi Electric products meant to improve CNC control and provide control systems solutions for export machines in line with 2023 vision set for Turkey as they visited the booths of a number of companies attending the exhibition. The visitors were able to have hands-on experience with M80 and M800 series, the new control units developed by Mitsubishi Electric specifically for CNC with a view to offering standardized high tech innovations such as the first CNC-dedicated CPU, fourth generation SSS, touch screen and intuitive operation. Thus, they not only witnessed Mitsubishi Electric technology more closely but also exchanged opinions about our new products with our highly specialized staff and global service organization both of whom are our technology partners in the international market.”

Saraçoğlu concluded by indicating that Mitsubishi Electric is ready to support all manufacturers that aim to increase their competitive power in the market thanks to their high tech factory automation systems and CNC products which offer high added value.

### ***High tech CNC products and automation solutions***

Mitsubishi Electric’s high tech CNC products set the standards for various industries globally including automotive and metal processing industries. The brand provides high tech solutions to all the industries by analysing and comprehending the real requirements of the market and users with the help of its vast experience on the industry. Producing comprehensive solutions for all factory automation processes, Mitsubishi Electric improves its superior technology continuously so as to increase the operational efficiency of factories and the comfort of employees.

Exhibiting its new M80 and M800 series CNC control units in MAKTEK Eurasia 2016, Mitsubishi Electric also introduced its high robot technologies to the visitors in addition to IQ Platform, Servo and Inverter products which are significant for factory automation.

### ***Machines manufactured with M80 and M800 CNC control units are used in Turkey***

Machines manufactured with Mitsubishi Electric’s new generation M80 and M800 series CNC control units are lately imported and used by Turkish manufacturers. Since M80

and M800 series CNC control units which are highly appreciated by the industry are fully harmonized with the previous M70 and M700 series, the customers who intend to adopt this new technology shall not need to undergo any harmonization process or attend additional training. The new series come with 8.4 inch, 10.4 inch, 15 inch and 19 inch high resolution display options while displays of 10.4 inch and above contain a standard touch screen. Besides, the customers shall have the option to cancel this function by means of changing the parameters.

A number of improvements provided by M80 and M800 series including but not limited to fourth generation SSS (Super Smooth Surface) and a new interface enabling intuitive operation have brought manufacturing standards one step further. The new series shall make it possible to perform more accurate, faster and more efficient operations thanks to fourth generation SSS control. G05 P20000 achieves higher number of pre-read blocks leading to higher speed and higher accuracy with surfaces. 3D program check makes it possible to review the drawings of parts and also acquire sectional views of parts prior to the operational phase. Meanwhile, graphical guides facilitate programming phases. It is now possible to store the machinery programs at SD cards in addition to USB. Simple visualization function allows for remote observation through transition from normal display to simple display. The alarm which is created through a new function can be displayed in a manner that shall cover the entire screen. Thus, the operator is able to see the alarm even when s/he is in a remote location. User authorization level definition capability makes it possible to define distinct access authorizations for operators based on their roles in manufacturing processes so as to minimize human-based errors. Besides, the new series shall be able to function coherently with manufacturing management systems (MES: Manufacturing Execution System).

### ***iQ Platform for faster production and lower costs***

The “fourth industrial revolution” or “new industrial phase” which has come to be known as “Industry 4.0” may be summarized as rehabilitating manufacturing processes with the help of cyber physics systems. Mitsubishi Electric responds to this new industrial phase in the world with e-F@ctory platform, a.k.a. digital factories. Indeed, e-F@ctory is not a new platform. Mitsubishi Electric has been employing e-F@ctory platform in its own manufacturing lines since 2003. Hence, it is able to reflect its expertise to its products and therefore, to its customers.

**iQ Automation Platform**, on the other hand, is one of the rare product families that are able to combine all important automation components in a single structure in that it has enabled the creation of e-F@ctory platform as an automation strategy improved by means of the global expertise and experience of Mitsubishi Electric in manufacturing industry. As an automation platform, the most important advantages of iQ are minimum TCO (total cost of ownership), full and smooth integration between factory automation management systems, maximum efficiency and high-speed communication. Thus, the costs are reduced at all steps of automation cycle making it possible to acquire maximum return from the investment.

iQ Platform allows robot systems which are frequently required in the new rapidly evolving domain of industry to control larger and more complex programmes. It becomes possible to monitor errors, variable values and programme details, status (speed, position etc.), maintenance information (remaining battery life, lubrication etc.), servo data (load factor, current values etc.). It allows for the collective control of multiple robots. A computer connected to the main CPU is able to have access to the robots in the controller network. This function facilitates control of robots in the line. Direct communication between CPU's enable data reading and writing by means of sharing the memory between robot CPU's. When the data transfer between robots gets faster, it becomes easier to control robots in a more detailed and coordinated manner. Even more complex systems such as transfer lines requiring processing, motion and line control are easily controlled by means of a single controller.

### ***High speed and accurate robot technology for different industries***

Appreciated for its high robot technology, Mitsubishi Electric is distinguished with its high speed robots operating with an accuracy close to human arms or hands in various industries including foodstuff, pharmaceuticals, packaging, automotive and domestic appliances. Mitsubishi Electric has designed various solutions involving robots for several industries requiring high speed production, dosage and packaging including packaging of wet napkins, packaging pharmaceutical drugs, polishing and gluing shoes, and packaging cube sugars. It also frequently preferred for assembly and quality assurance purposes such as assembling door handles available in the cars and testing sound system touches. There are various practices conducted by Mitsubishi Electric in global domestic appliances industry. Manufacturing all the components of the robots internally, Mitsubishi Electric is able to provide services to different industries by combining its know-how and expertise on manufacturing operations.

### ***FR-F800 new generation integrated PLC high level frequency inverter***

This new product of Mitsubishi Electric provides much more than conventional frequency inverters thanks to its integrated PLC functions. **FR-F800**, which is ideal for pumps, compressors and fan applications with their specific functions, reduces total costs due to improved energy efficiency opportunities. Also, it perfectly harmonized with peripheral elements thanks to its advanced PID and internal PLC functions. **FR-F800**, which is capable of operating PM IPM engines, is distinguished as a product with the capability to get back-up and trending from USB. Offering easier maintenance opportunities, the product can be operated with different coding protocols such as TLL and SynCos and it has IP55 supported models. The real time watch used for PLC software is also available in this high level frequency inverter.

### ***About Mitsubishi Electric Corporation***

*With over 90 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 endeavours to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,394.3 billion yen (US\$ 38.8 billion\*) in the fiscal year ended March 31, 2016. For more information visit: [www.MitsubishiElectric.com](http://www.MitsubishiElectric.com)*

*\* At an exchange rate of 113 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2016.*

### ***About Mitsubishi Electric Turkey Operations***

*Mitsubishi Electric concentrates on sales and after-sales services for HVAC systems, factory automation systems, CNC-Mechatronics systems and advanced robot technologies in Turkey. In addition, the company provides support for satellite, elevator, visual data systems, power sources and transportation-based infrastructure projects. Mitsubishi Electric, the acknowledged manufacturer of Turksat 4A and 4B satellites contributing to communication and broadcasting infrastructure of Turkey and neighbouring countries, is also recognized for the automation technology used for Marmaray project. Having incorporated a company for development and manufacturing of room air-conditioners in Turkey in April 2016, Mitsubishi Electric intends to start manufacturing operations in Manisa plant by January 2018. For more information visit: [www.mitsubishielectric.com.tr](http://www.mitsubishielectric.com.tr)*

### ***About Mitsubishi Electric Turkey Factory Automation Systems***

*Mitsubishi Electric Turkey Factory Automation Systems division provides added value to leading industrial corporations in Turkey in a range of fields including automotive, foodstuff, packaging, metal and PVC processing machinery in terms of fast integration, efficiency, flexibility and productivity. It has adapted to “Industry 4.0”, the new industrial phase, with its **digital factory** platform known as **e-F@ctory**. Mitsubishi*

### ***About Mitsubishi Electric Turkey CNC Mechatronic Systems***

*Mitsubishi Electric provides leading machinery manufacturers in Turkey with CNC products and engineering solutions. It sets the standards for various industries globally including automotive and metal processing industries thanks to its high tech CNC products.*