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Mitsubishi Electric Displays New Generation Products at WIN Automation

MITSUBISHI ELECTRIC IS THE ADDRESS OF HIGH TECH AUTOMATIONS

Mitsubishi Electric, a recognized global automation leader, launched its FR-F800 New Generation Integrated PLC High Frequency Inverter at WIN Eurasia Automation, an exhibition organized for introducing the latest technologies in industrial automation practices. As Mitsubishi Electric exhibited the new generation factory automation and mechatronics CNC products, Mitsubishi Electric Turkey President Masahiro Fujisawa indicated that the company develops technologies ideal for high tech and energy efficient automation requirements of Turkish industry as it continues to grow rapidly.

Mitsubishi Electric turned out to be the rising star of WIN Eurasia Automation, which was organized for the 23rd time this year on 17-20 March with a view to introducing integrated solutions for new generation factories, thanks to its high technology. Introducing **FR-F800 New Generation Integrated PLC High Frequency Inverter**, which was launched globally this year, the company also displayed various factory automation solutions and mechatronics CNC products to underline once more that it is ready to bring Turkey to the new automation revolution.

“Using our automation expertise for supporting Turkey in global competition”

Indicating that global manufacturers rely on Mitsubishi Electric for high automation equipment for more than 75 years, **Mitsubishi Electric Turkey President Masahiro Fujisawa** made the following explanation:

“Mitsubishi Electric Factory Automation Systems offers added value to factories operating in various industries in terms of fast integration, productivity, flexibility and efficiency. Mitsubishi Electric Turkey uses this expertise to help rapidly growing Turkish industry to

gain manufacturing capabilities in line with the requirements of our age, attain the highest level of quality and become much more competitive in global scale. As Turkish industry continues to grow rapidly, we believe it shall increasingly require high technology automation solutions providing energy efficiency. We are quite able to respond to those challenging requirements. And we are very excited to introduce our new generation factory automation solutions and mechatronics CNC products including specifically FR-F800 New Generation Integrated PLC High Frequency Inverter in WIN Eurasia Automation, which is one of the most significant automation exhibitions.”

“We provide high quality solutions in Turkey”

Masahiro Fujisawa explained that the company provides high quality services to Turkish customers by combining factory automation products with engineering capabilities on design, project design, software and commissioning operations: “Infrastructure projects are quite significant for the operations of our company. Lately, we completed “Station Information and Management System Project” for Mitsubishi Electric offered high tech automation equipment, engineering and design, project design, software programming, hardware assembly, commissioning, training and service support services for Marmaray BC1 Bosphorus Sub-Sea Tunnel Project.”

Factory automation solutions providing advantages to industries

Producing comprehensive factory automation solutions for all processes conducted in factories, Mitsubishi Electric continues to further improve its high technology every other day in order to increase the operational efficiency of factories and comfort of employees. Offering services to leading Turkish industries such as automotive, foodstuff, packaging, metal and plastic processing machines, Mitsubishi Electric makes use of mechatronics comprised of mechanical, electronic and software services to produce digital factory products used for the manufacturing phases of many industries.

Launching **-F800 New Generation Integrated PLC High Frequency Inverter** during WIN Eurasia Automation 2016, Mitsubishi Electric introduced SCADA solution, IQR and IQF products, e-F@ctory concept, advanced robot technologies and mechatronics CNC products developed for factory automation to the visitors.

FR-F800 New Generation Integrated PLC High Frequency Inverter

This new product launched by Mitsubishi Electric during the exhibition offers much more than conventional frequency inverters thanks to its integrated PLC functions. Mainly designed to be used with pumps, compressors and fans, **FR-F800** features many innovative functions that contribute to reducing total costs by means of improved energy efficiency. Besides, it is perfectly compatible with advanced PID and internal PLC functions and peripherals.

Capable of auto-tuning PM IPM motor, **FR-F800** is distinguished as a product that allows performing back-up and trending processes via USB. The product facilitates maintenance activities and it comes with IP55 supported models, an additional advantage to operating capability with different coding protocols such as TLL and SynCos. The real-time clock which is used for PLC software is also available in this high frequency inverter.

SCADA Solution

Mitsubishi Electric's SCADA solution adds value to engineering and integration projects by eliminating the deficiencies inherent in most PLC-SCADA integration tools and reduces the engineering time spent for development and construction purposes thanks to the wizard interfaces capable of creating PLC and SCADA project automatically. Also, it allows for a standard construction that facilitates maintenance operations of an enterprise during its life cycle.

With MAPS, reports covering areas such as I/O schedules, PLC and SCADA tag configuration can be automatically generated. This automatic report generation ensures that the project on handover also reflects the "as built" up-to-date electrical and instrumentation drawings that are aligned to the SCADA tags and PLC I/O. The reports are database driven, so even through on-going maintenance the reports will always reflect the current status of the electrical and instrumentation configuration. MAPS also helps to keep the project documentation up-to-date. During the design phases and whenever systems are modified or updated in time, MAPS provides uninterrupted administration capability in line with the electric certifications created for the system of the enterprise as well as PLC/SCADA projects.

iQ-R New Generation Process Automation Controller

New generation iQ Platform structure combining all automation components at a single platform for new automation revolution. Meeting the requirements of the most challenging systems with its nanosecond level processing rate (LD processing rate is 0,8 ns), iQ-R offers a readymade platform for the new industrial phase and e-F@ctory, Mitsubishi Electric's response to the new industrial phase. PLC of tomorrow's world has been designed and created by Mitsubishi Electric.

iQ-F New Generation Compact PLC

Being the newest generation of the best-selling compact PLC in the world, iQ-F offers 150 times faster BUS communication in comparison with the previous model. Also known for internal 4 axis positioning capability, compact PLC is worthy of use even in more sophisticated applications thanks to its motion capacity, easy set-up capability and new engineering software. Analogue Inlets/Outlets, Ethernet and Fast inlets available in the standard hardware enable you to complete various tasks while occupying little space at the panel.

New M80 and M800 Series CNC Control Units

Marketed in Turkey as of 2016 by Mitsubishi Electric, the new products are in perfect harmony with the previous M70 and M700 series according to which an additional harmonization or extra training is not required for customers that shall switch to the new series. The new series marked with high processing capability communicates with servo motor drives via optic cable.

The new series come with 8.4 inch, 10.4 inch, 15 inch and 19 inch high resolution display options.

The standard touch screen function for 10.4 inch displays and above may be cancelled optionally. The new touch screen display is capacitive and provides intuitive usage experience as in mobile phones and tablets. 19 inch display may be divided into 2 sections. The upper section displays CNC screen while the lower section opens the virtual keyboard, operator panel, document viewer or memo pad.

Digital factories for the digital world

Mitsubishi Electric Factory Automation responds to the new industrial revolution in the world with e-F@ctory, a.k.a. digital factories. e-F@ctory concept enables all new generation products embedded in the factory automation technology including

robots communicate with one another via internet protocols. Thus, the production lines are customized according to individual needs in a manner that makes it easier to become competitive more than ever.

e-F@ctory provides the companies with significant advantages in global competition in that it creates important cost effectiveness in manufacturing processes by using high technology to optimize all factory layers from manufacturing to management levels. Mitsubishi Electric allows for the establishment of a factory that responds to all the requirements in the new industrial phase and testing the factory and production before establishing the actual factory by means of a factory simulation.

Mitsubishi Electric's e-F@ctory accelerates manufacturing processes with its fast connection and short renewal periods and sets the ground for safe and continuous manufacturing processes by eliminating such risks as system crash or computer virus since the platform does not make use of computers. Energy measurement devices available in the system make it possible to see how much energy is used for manufacturing every single product which facilitates cost calculation. The system is monitored online so as to keep the manufacturing processes under control anywhere and anytime. Providing all kinds of details required during manufacturing processes, the system enables operators to detect faults with products and review the production line retrospectively to see if there were any problems with the relevant line.

Fast robots with the precision of human hands

Thanks to its high robot technology, Mitsubishi Electric creates difference with its high-speed robots operating with a precision close to human arms or hands in various industries such as food, medicine, packaging, automotive, and domestic appliances. Manufacturing all the components of robots in its own plants, Mitsubishi Electric is able to offer services to different industries by combining its production know-how and expertise to promote the robot technologies.

“Eco Changes” for a better future

Endeavouring to be a global, leading green company, Mitsubishi Electric contributes to the improvement of the community with its high technology. Embracing its environmental statement, “Eco Changes”, Mitsubishi Electric makes efforts to increase the environmental awareness of its employees and the community and acts in accordance with

this principle. “Eco Changes”, which is in line with “Changes for the Better” Mitsubishi Electric’s corporate statement meant to underline its commitment to continuous development and change, represents Mitsubishi Electric’s efforts to better the world and environment.

As Mitsubishi Electric makes progress towards 2021, its centenary, it acts in line with “Environmental Vision 2021”, its long-term environmental vision. Based on this vision, it prioritizes encouraging environmental awareness and contributing to the awareness on the importance of creating a recycling based society and reducing carbon emissions.

As it works towards a sustainable future, Mitsubishi Electric aims to provide added value to the industry, infrastructure projects, shopping malls, hotels, residence and office projects in Turkey as in the rest of the world with the high tech, energy efficient, eco-friendly and innovative factory automation products and solutions developed based on its well-rooted innovation and know-how.

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