

February 2016

Mitsubishi Electric addresses the industry on heating, ventilation and air-conditioning automation

HIGH QUALITY AND EFFICIENCY AUTOMATIONS

A leading global brand in terms of “high technology” processes, Mitsubishi Electric hosted an event in Istanbul to introduce its significant heating, ventilation and air-conditioning projects in Turkey. The high value added automation solutions designed by Mitsubishi Electric for Marmaray were explained in detail during the event while Mitsubishi Electric Turkey President Masahiro Fujisawa underlined that the company provides high quality and efficiency automation solutions by reinforcing its significant know-how with the ability to analyse the requirements of the market properly.

A global leader in electric, electronic and automation industries which is especially known for its automation technology used for Marmaray project in addition to Turksat 4A and 4B satellites in Turkey, Mitsubishi Electric held its second sectoral meeting for heating, ventilation and air-conditioning automation technologies in Istanbul following Ankara. Mitsubishi Electric Turkey organized an event concerning “**Heating, ventilation and air-conditioning automation solutions**” with the participation of the representatives from public and private industries, investors, constructing companies, contractors, advisors and universities in Sheraton Istanbul Ataköy on February 10, Wednesday.

Mitsubishi Electric Turkey President Masahiro Fujisawa, who uttered the inauguration speech, reminded the audience that Mitsubishi Electric is a 95-year-old world giant operating in 43 countries with more than 120 thousand employees to develop high quality products for various industries by means of its high technology and

innovative approach. Masahiro Fujisawa underlined that Mitsubishi Electric provides solution oriented high technologies by reinforcing its significant know-how with the ability to analyse the requirements of the market and users properly.

Fujisawa pointed out that global manufacturers rely on Mitsubishi Electric for high quality and efficiency automation systems for 95 years and said: “In Turkey, we provide high quality services by combining our factory automation products with engineering skills in terms of design, project design, software and commissioning activities”.

What was the focus of the event?

After Mitsubishi Electric Turkey President Masahiro Fujisawa uttered the inauguration speech, division managers made a number of presentations to provide detailed information about the HVAC (heating, ventilating and air conditioning) automation systems developed by Mitsubishi Electric which is a leading actor in Turkey as in the rest of the world. Heating, cooling and mechanical ventilating system solutions of Mitsubishi Electric were explained through demonstrations and the special fire system solutions, electric distribution and management systems were also introduced.

Bülent Özince from Taisei Corporation made an interesting presentation

The lecture given by Taisei Corporation Electromechanics Manager Bülent Özince, who participated in the event as a guest lecturer, proved to be highly popular with the audience. A leading Japanese company that undertakes important projects throughout the world since 1873, Taisei Corporation is known for Marmaray project in Istanbul. In that respect, Bülent Özince provided information about the construction of Marmaray tunnel conducted by Taisei-Gama-Nurol consortium and the outstanding services offered by Mitsubishi Electric as an added value to the project.

Contributions of Mitsubishi Electric to Marmaray

Mitsubishi Electric Turkey Factory Automation Systems was in charge of “Station Information and Management System Project” for Marmaray as an important infrastructure project. 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. Conducting control and monitoring activities for electromechanical equipment in the tunnel, stations, ventilation buildings and generator buildings,

Mitsubishi Electric realized the scenarios required for feeding the energy systems of Marmaray by means of two TEIAS and two generator groups at both sides.

The services conducted by Mitsubishi Electric in tunnels under Marmaray Bosphorus Sub-Sea Tunnel Project consist of controlling and monitoring ventilation system, initiating, suspending and monitoring smoke removal scenarios, opening and closing flood covers, monitoring drainage systems and alarms, monitoring and controlling illuminations, monitoring environmental measurement systems and fire alarm and extinguishing systems. The services in stations and ventilation buildings consist of controlling and monitoring common spaces and room fans, low voltage distribution and UPS systems, fire and extinguishing systems, illuminations at common spaces, clean water, foul water and waste water system, escalators and elevators.

100 percent back-up control system for Marmaray

Designed with 100 percent back-up, the control system is made up of 37 thousand hardware monitoring and check points, 107 thousand software monitoring and check points, 750 operator monitor control pages and 100 kilometres of communication cables. The control system enables operators to contact the train operator at the scene and determine the air flow direction for eviction of passengers and smoke in case of any fire in the tunnel. Thus, the system provides guidance to the operator to initiate the defined ventilation scenario easily by minimising the error probability.

Outstanding HVAC systems automation projects

As the global automation giant, Mitsubishi Electric aims to act as a solution partner for other infrastructure projects, factories, residence and office projects as well as hotels, shopping malls, parking lots, tunnels, pools and similar collective areas in Turkey as in Marmaray. Mitsubishi Electric automation solutions ensure that each component of HVAC system communicates with one another making it possible to manage the system from a single hub. Combining its automation know-how on HVAC industry with its high technology, quality and engineering expertise, Mitsubishi Electric also offers customized solutions for specific projects.

Mitsubishi Electric not only creates significant energy efficiency and reduces costs for enterprises and projects but also provides healthy, comfortable and safe spaces thanks to its user friendly and long-lasting automation solutions. It reduces carbon dioxide emissions and total emissions arising from using and manufacturing products respectively. It ensures savings for speed control and lighting control system applications. Thus, Mitsubishi Electric is recognized as an ideal solution partner for HVAC systems automations of eco-friendly plants and projects.

Management from a single centre

Technology leader Mitsubishi Electric uses control systems compatible with e-F@ctory concept to manage various systems such as heating, cooling, ventilating, lighting, generator, hydrophore, water treatment, carbon dioxide monitoring and exhaust control systems at parking lots from a single centre at complex buildings including shopping malls, hotels and business centres in addition to highways, tunnels, dams, power plants, factories and similar industrial establishments. Those systems can also be integrated with CCTV (closed circuit television), card pass, fire detection and other similar security systems to control the entire structure from a single centre with minimum work force and maximum efficiency.

Eco changes for a better future

Striving for a better future and a sustainable world as a green company, Mitsubishi Electric used to be sensitive to environment long before it gained importance for the world. When it came to be known as an innovative electronic manufacturer in Japan in 1960's, it had already invented a number of eco-friendly manufacturing technologies. Based on "Environmental Vision 2021", the long-term environmental vision that shall culminate in 2021, Mitsubishi Electric's centenary, and its environmental statement, Eco Changes, Mitsubishi Electric prioritizes encouraging environmental awareness and contributing to the awareness on the importance of creating a recycling based society and reducing carbon emissions.

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 4,323.0 billion yen (US\$ 36.0 billion) in the fiscal year ended March 31, 2015. For more information visit: www.MitsubishiElectric.com*

** At an exchange rate of 120 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2015.*

mitsubishielectric.com.tr