Mitsubishi Electric to Launch “EcoAdviser” AI-enabled Energy Software

Uses Maisart-brand AI to automatically identify energy losses in production equipment

TOKYO, October 19, 2020 – Mitsubishi Electric Corporation (TOKYO: 6503) announced today that the company’s new EcoAdviser data-analysis and diagnostic software (MES3-EAP1-AI) for increased energy savings at manufacturing facilities will be released on October 26. The innovative new software uses Mitsubishi Electric’s Maisart®*-branded artificial-intelligence (AI) technology for highly effective energy-saving functions, such as identifying energy losses, diagnosing potential energy-loss factors and quantifying the expected effects of energy-saving measures.

Energy efficiency and energy conservation continue to gain importance as the monetary and environmental costs of energy steadily rise. To mitigate such costs, new technologies such as AI and the Internet of Things (IoT) are expected to help realize effective energy-saving solutions at production sites. Mitsubishi Electric’s new EcoAdviser software will provide energy-saving data analysis and diagnostics-based recommendations that go beyond simple visualization to support meaningful energy-saving solutions in the manufacturing sector.

* Mitsubishi Electric's AI creates the State-of-the-ART in technology

EcoAdviser AI-enabled software for energy-saving data analysis and diagnostics

Analysis screen with dashboard function
Key Features

1) **Maisart AI and 5-point methodology automatically identify energy losses in manufacturing**

Previously, factories needed to perform continuous self-analysis building on data collected and field inspection results in order to determine energy loss. EcoAdviser identifies and quantifies energy losses based on AI analysis and Mitsubishi Electric’s five-point methodology: 1. equipment time-loss when starting up, 2. equipment time-loss when shutting down, 3. operational time-loss of utility equipment, 4. non-operation rate of equipment, and 5. specific energy consumption. Factors closely correlating with energy loss such as date and time, equipment and so on are prioritized in terms of potential for reducing losses through recommended countermeasures. Also, key points are clarified to ensure effective energy-saving measures. Factor diagnosis steadily improves as AI learns conditions and ongoing results.

2) **Visualization of improvements realized through energy-saving initiatives**

Users can quickly confirm the scope of improvement through before-and-after comparisons of results. By continuously analyzing the effectiveness energy-saving countermeasures in a quantitative manner, improvements can be steadily enhanced by separately reviewing the effectiveness of each initiative.

3) **Customizable energy dashboard enables diverse analytics**

A customizable dashboard allows users to focus on priority issues and key performance indicators (KPIs). Additionally, empirical evidence has shown that sharing energy KPI data with factory workers on large displays in a worksite promotes greater awareness and more attention to energy saving. EcoAdviser offers diverse analytical graphics, including pie charts, rankings, time series, box plots, scatter diagrams, pareto charts and histograms.

Additional Key Feature

EcoAdviser software supports the Edgecross connectivity platform for connecting to and using data from devices and equipment of diverse vendors and networks. Edgecross is an open edge-computing domain platform that enables collaboration between factory automation and information technology.

About Maisart

Maisart encompasses Mitsubishi Electric’s proprietary AI technology, including compact AI, automated-design deep-learning algorithms and extra-efficient smart-learning AI. Maisart is an abbreviation for "Mitsubishi Electric's AI creates the State-of-the-ART in technology." Under the corporate axiom "Original AI technology makes everything smart," the company leverages original AI technology and edge computing to make devices smarter and life more secure, intuitive and convenient.

Maisart and EcoAdviser are registered trademarks of Mitsubishi Electric Corporation.

Edgecross is a trademark of the Edgecross Consortium.

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About Mitsubishi Electric Corporation
With nearly 100 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) 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. Mitsubishi Electric enriches society with technology in the spirit of its corporate statement, “Changes for the Better,” and environmental statement, “Eco Changes.” The company recorded a revenue of 4,462.5 billion yen (U.S.$ 40.9 billion*) in the fiscal year ended March 31, 2020. For more information, please visit www.MitsubishiElectric.com

*U.S. dollar amounts are translated from yen at the rate of ¥109=U.S.$1, the approximate rate on the Tokyo Foreign Exchange Market on March 31, 2020