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**FOR IMMEDIATE RELEASE**

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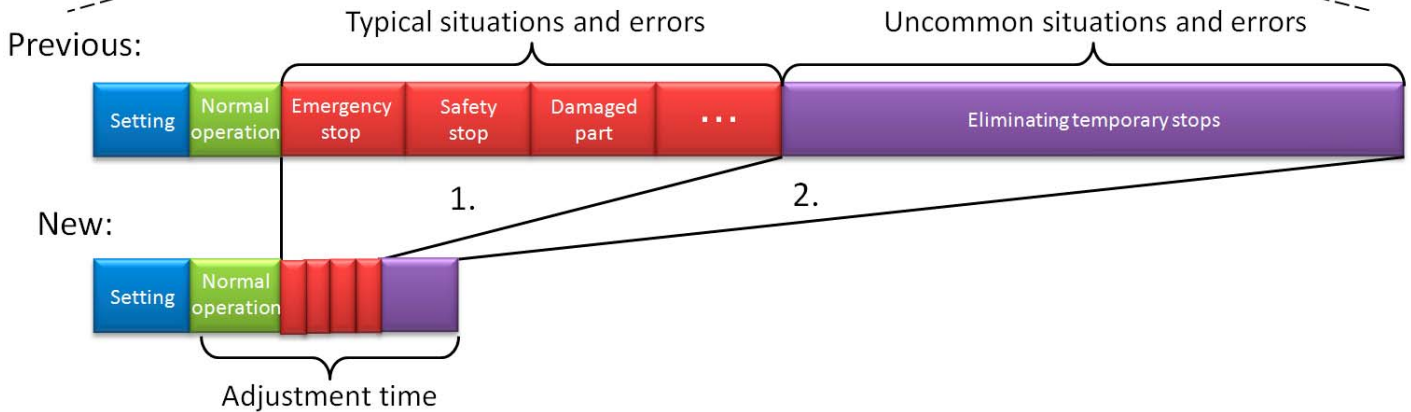
## **Mitsubishi Electric Develops Manufacturing Technology for Virtual Validation**

*Decreasing on-site adjustment time up to 75 percent*

**TOKYO, February 17, 2016** – [Mitsubishi Electric Corporation](http://www.MitsubishiElectric.com) (TOKYO: 6503) has created a next-generation manufacturing technology that virtualizes and simulates the motion of products and sensor data in FA controllers, making the startup and replacement of assembly lines more efficient and reducing on-site adjustment time up to 75 percent. It enables operators to generate errors such as temporary line stops in a virtual environment for the FA controller and then adjust actual line operations accordingly.

Currently, assembly line validation is carried out manually according to a test scenario, requiring repeated operational tests on an actual line to generate uncommon and hard-to-replicate errors. Mitsubishi Electric's virtualization technology for FA controllers simulates product signals and sensor data as if the actual line were running. Because the design of the virtual line is flexible, the system enables quick reproduction of errors. Also, since actual products are not required to be on the line during the test, accidental damage and preparation costs can be significantly reduced. The virtualization technology reduces on-site adjustment time by 75 percent compared with the current method.

Test programs previously used in computer simulations can be imported for the virtualized testing. The technology can also be combined with programs that replicate temporarily malfunctioning products or sensors for automatic verification.



### Comparing On-site Adjustment Times

1. Decreased time and cost for validation, as manual operations are not required.
2. Testing for uncommon errors can also be shortened through the use of comprehensive automated test programs.

#### **Background**

Recently, customers have increasingly demanded multi-product, variable quantity production capabilities to meet their diverse and unique needs. Manufacturers need to be able to expand and redesign a line while keeping downtime at a minimum, so the industry has been focused on using the computerized pre-validation of virtual lines to expedite the process. However, even with pre-validation, it is still necessary to confirm the results on an actual line due to slight differences in virtual and actual environments. Human operators have to arrange and inspect the line, which can be costly in terms of time and labor, and it is also difficult to completely eliminate uncommon errors.

#### **Patents**

Pending patents for the technology announced in this news release number seven in Japan and two abroad.

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

With over 90 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. 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 4,323.0 billion yen (US\$ 36.0 billion\*) in the fiscal year ended March 31, 2015. For more information visit:

<http://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