



The Best Partner for Your Success

MITSUBISHI CNC NEWS Vol.4

Exhibition Report

JIMTOF2018 (November 1–6, 2018)

Mitsubishi Electric exhibited full line-ups and new functions of Computerized Numerical Controllers (CNC) at JIMTOF 2018, the largest machine tool exhibition in Japan. As many as 1,085 exhibitors and 150,000 people from all around the world attended the exhibition over six days. Over 20 thousand customers such as machine manufacturers, dealers, and end users visited our booth, making this year's exhibition a great success.

Cutting-edge technology and the most advanced machine tools were exhibited under this year's theme "Connect". We saw a great deal of exhibits focusing on connecting people, machines, and factories through the IoT.

We exhibited our latest CNC lineup, direct robot control function, and our new service "iQ Care Remote4U".

We will continue to support our customer's environment of manufacturing by developing new technologies that contribute to the machine tool industry, and further expanding our world wide sales and service network.



Mitsubishi Electric booth

Exhibit features

[Latest CNC lineup]

We exhibited our latest CNCs: M800, M80, E80 and C80 series, which can meet various required specifications from simple to high precision machine tools.

In addition, we also exhibited our latest drive products such as a multi-hybrid drive unit (MDS-EM-SPV3-320120), and a high torque spindle motor (SJ-DN series).



CNC section

[Direct robot control (M800, M80, E80 series)]

Robots can now be programmed directly from the CNC. This reduces costs as a robot HMI is no longer needed.

G code programs can be created interactively, making robots accessible to even those who don't have robot programming experience. This is a new function to meet the needs of automated production lines.



Demonstration of direct robot control

[AI thermal displacement compensation function (M800, M80, E80, C80 series)] Pre-release

The AI thermal displacement compensation function creates a thermal displacement model by using AI to study temperature and thermal displacement. Thermal sensors are used to read the machine's surrounding temperature and heat generated during operation. AI compensates for thermal displacement in real-time in accordance with the machine status by predicting the amount of displacement based on temperature and data from the thermal displacement model.



Demonstration of the AI thermal displacement compensation function.

2018 Mitsubishi Electric CNC New Product Introduction Seminar (November 3, 2018)

On November 3, we held the Mitsubishi Electric CNC New Product Introduction Seminar in a separate building close to the exhibition. This year a record number of visitors attended our session.

Both the new functions for the M800, M80, E80, and C80 series as well as our IoT solution received positive feedback.



New product information seminar

IMTS2018 (September 10–15, 2018)

Mitsubishi Electric exhibited the M800, M80, and C80 series CNCs at America's largest machine tool exhibition (IMTS 2018) in Chicago. As many as 2,563 exhibitors and approximately 130,000 people attended the exhibition over six days and our booth attracted a large amount of customers.

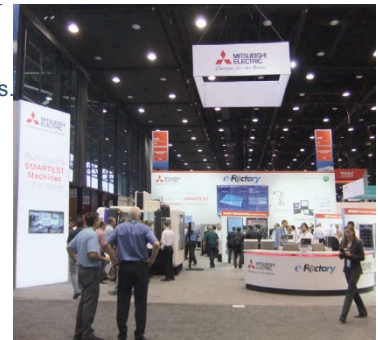
The exhibition focused mainly on the IoT and automation. We exhibited an operation monitoring solution and a robot combined with sensors.

Also, We had a booth in the Student Summit for the first time. The exhibit consisted of a hands on experience where students were able to create name tags using our CNC demonstration machine.

We will continue to create new technologies and strengthen our services so that customers can be satisfied with our CNC.



Section for students

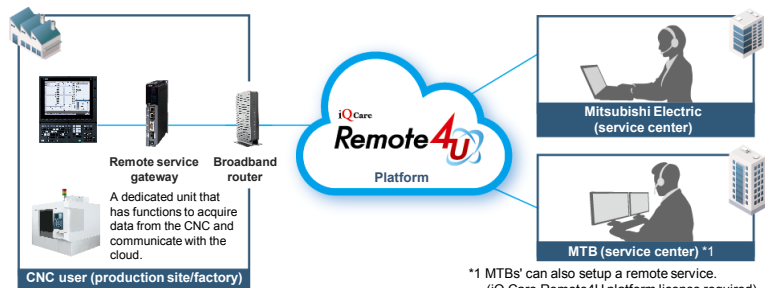


Mitsubishi Electric booth

New Product & Technology

1) Remote service - iQ Care Remote4U

On January 7, 2019 we will roll out our remote service "iQ Care Remote4U" which supports remote servicing of machine tools with our CNCs. The service previously supported our EDMs and laser processing machines only. As well as remote support for end user's machine tools, we will also support MTBs with the implementation of their own remote service.



*This service is available only in Japan now and will be released gradually in other countries and areas.

1 MTBs can also setup a remote service. (iQ Care Remote4U platform license required)

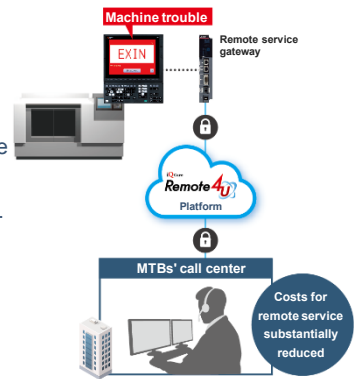
Remote support for NCs (for end users)

Mitsubishi Electric service staff remotely diagnose customer's CNCs, and provide support based on correct data, helping to reduce downtime.



Remote service for machine tools (for MTBs)

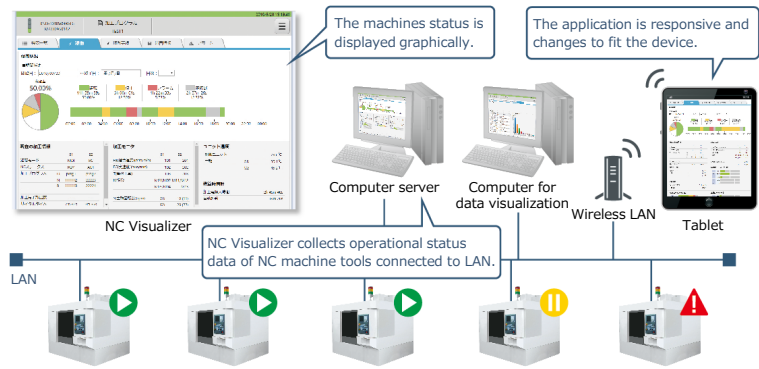
Mitsubishi Electric's cloud server substantially reduces the cost of implementing a remote service. MTBs can create their own maintenance service based on data collected from machine tools.



2) NC Visualizer

An operation monitoring system can be created by installing NC Visualizer onto a computer used as a server.

This can be used to analyze the causes of alarms, improve operation rates and quickly check the operation/power status of machines. It is also possible to view the status of machines on other PCs or tablets using a web browser.



MITSUBISHI ELECTRIC CORPORATION

