#### MOVE THE WORLD FORW RD MITSUBISHI HEAVY INDUSTRIES GROUP

## Needs and challenges for Wireless Factory

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#### **LoT International Symposium 2018**

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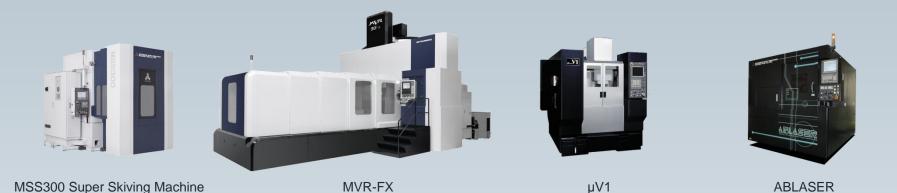
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## Mitsubishi Heavy Industries Machine Tool



#### Gear Machining



#### **Die Mold** Machining

High Precision Laser Micro Machining



Machining







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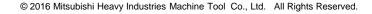


# **Operation Panel**

Problems to be solved Machine Emergency Stop when wireless communication disconnected

Issues Resolved •Wide Working Space •Safe Walking

#### Manual Pulse





Cable

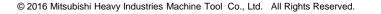
# Sensing

## Proximity switch

Problems to be solved
Real-time Big Data
Wireless Power Supply

#### Gap Sensor

Issues Resolved
Wire-saving
Extendibility
Flexibility





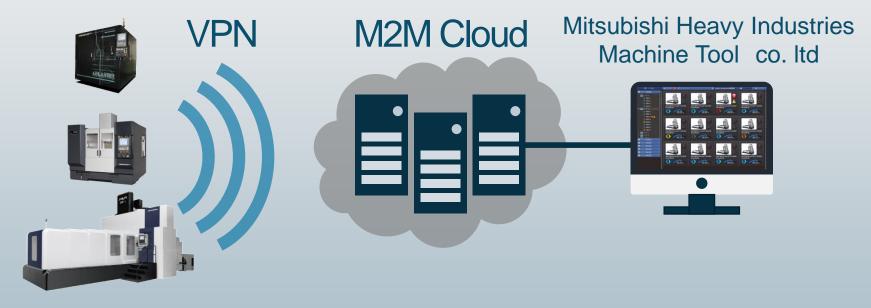
#### Issues Resolved • Extendibility • Flexibility • No Need Factory Wired LAN

#### Problems to be solved

•High security

-Unified communication standards between countries

Communication expenses



## **IoT Device**



# Summary

- Problems to be solved for Wireless Factory • communication Reliability (Stable and fast communication)
- •Wireless **Power** Supply / Power saving wireless communication
- Unified communication Standards between countries

# Thank you



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