

FACTORY AUTOMATION

FA Application Package

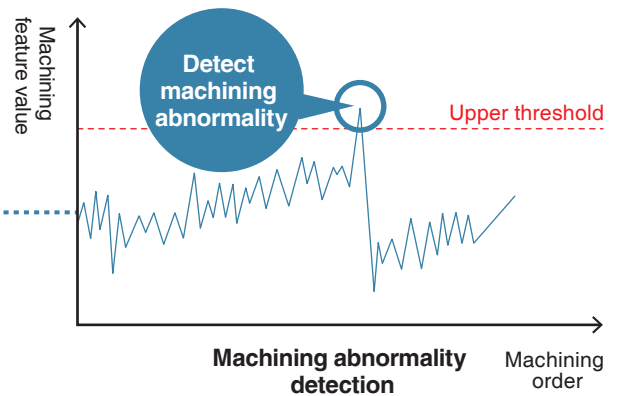
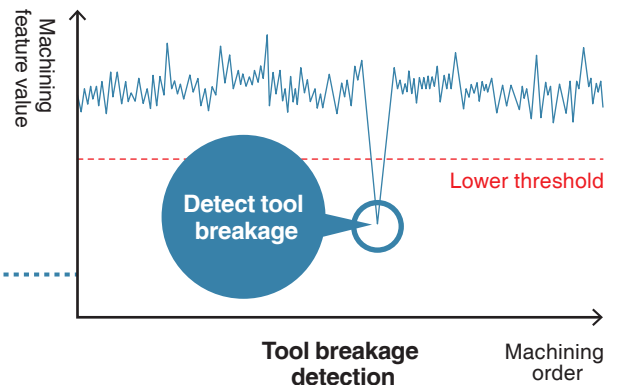
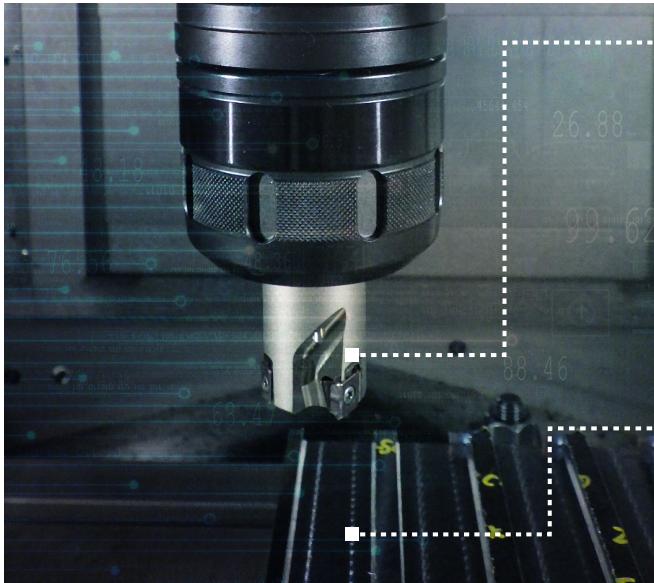
iQ Monozukuri Tool Wear Diagnosis for Machine Tools



01

Defect reduction by detection of tool abnormality

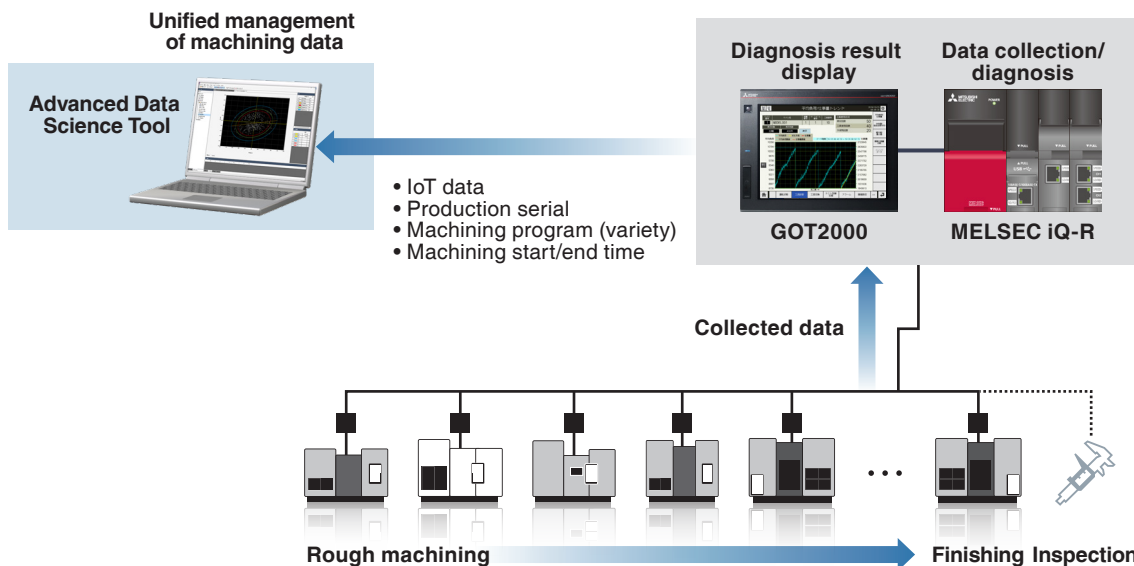
- Prevent machining abnormality by immediate detection of tool breakage, chipping, or defective workpiece for various machining.
- By utilizing the abnormality diagnostic model, machining defects can be detected prior to the inspection process, preventing the mass production of defective products.



03

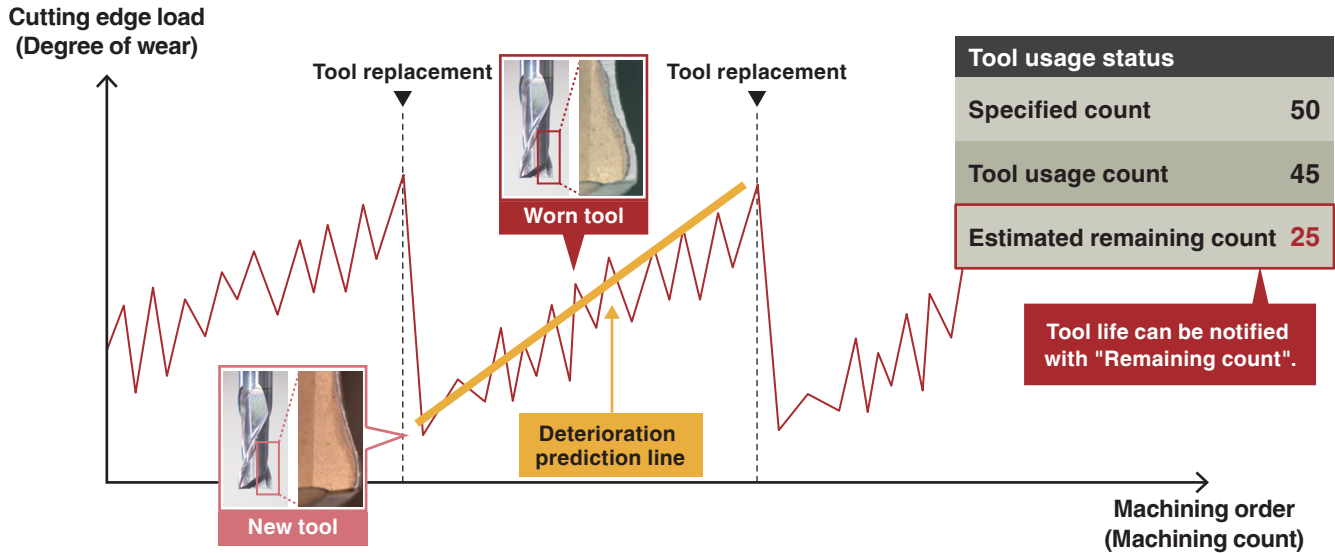
Machining data traceability

Machining data can be collected from up to 10 machine tools, enabling integrated machining diagnosis and tool replacement operations. The collected data contains information such as variety, machining conditions, production serial, and tool number, which can be used for traceability.



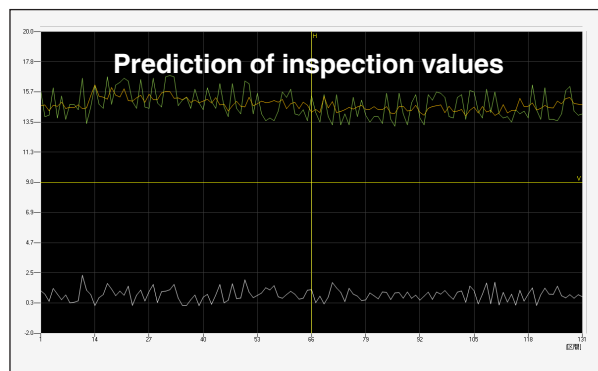
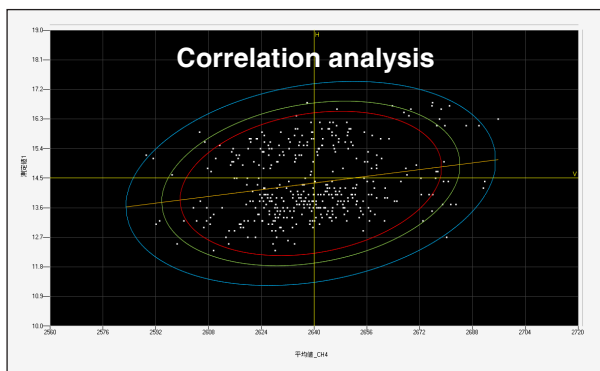
02 Predict tool replacement timing through diagnosis of the tool sharpness.

■ The tool life is estimated based on machining conditions. Using the tool to the limit of its life can reduce the total tool costs and man-hours for replacement.



04 Machine learning based machining accuracy prediction

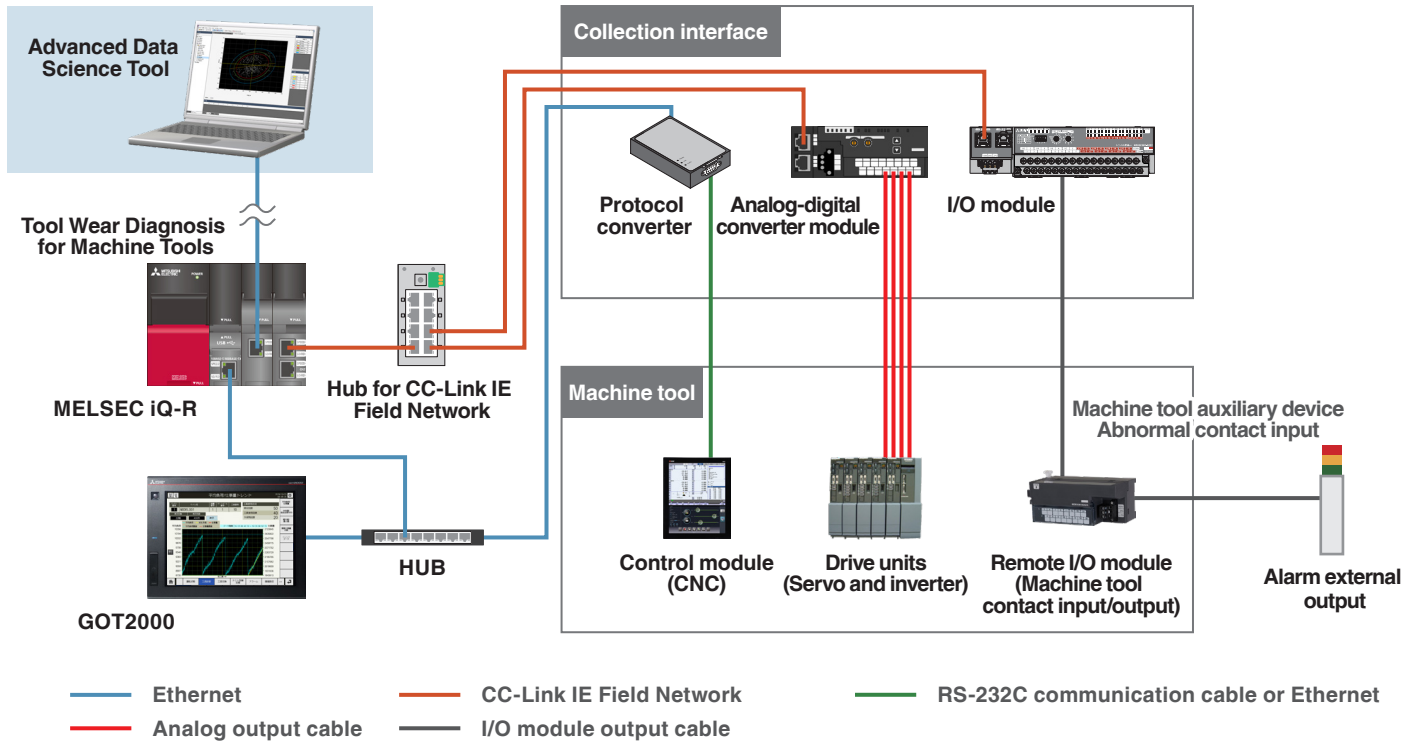
By interfacing with separately sold "Advanced Data Science Tool", a highly accurate quality predictive model (for automatic inspection) can be created through machine learning of the relationship between IoT data and quality (inspection data), enabling automatic detection of machining abnormalities.



Advanced Data Science Tool

Mitsubishi Electric FA Application Package iQ Monozukuri Tool Wear Diagnosis for Machine Tools

System Configuration



Get more details of iQ Monozukuri Tool Wear Diagnosis for Machine Tools! ▶▶

Catalog



FA Application Package
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