Precision machining, Automated production system, Mechatronics De204

YOSHIOKA LAB.

Controlled Precision Machining

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Production Engineering
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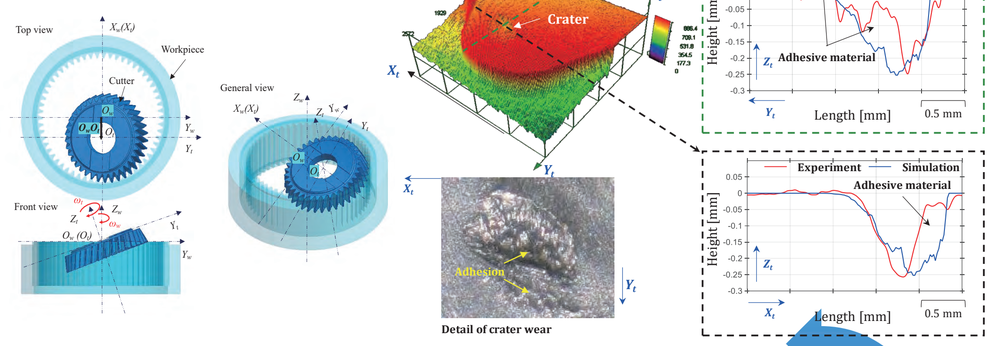
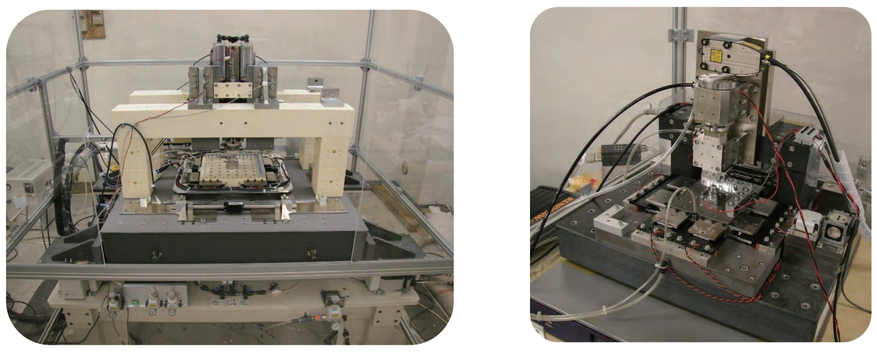
https://yoshioka-lab.iis.u-tokyo.ac.jp/

- Realization of Advanced Machining Technology
- Control of Machining Factors nearby Machining Point

Gear skiving simulation



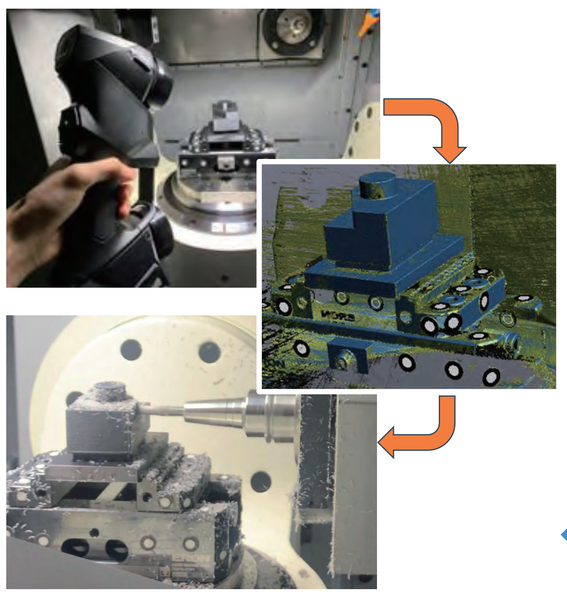
- Motion modeling
- Tool wear prediction



Development of ultraprecision system

- Ultraprecision machining system
- Ultraprecision measuring system

Flexible machining system



- Non-specialized jig machining
- Automated production systems

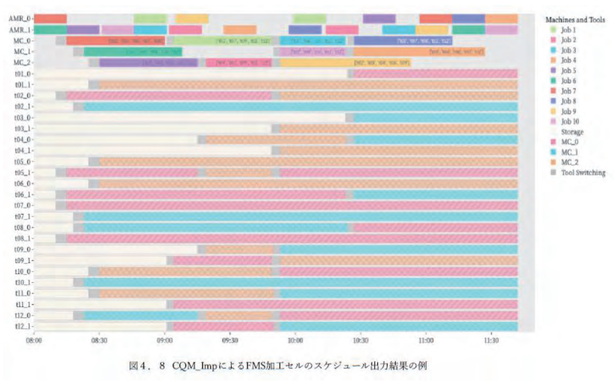
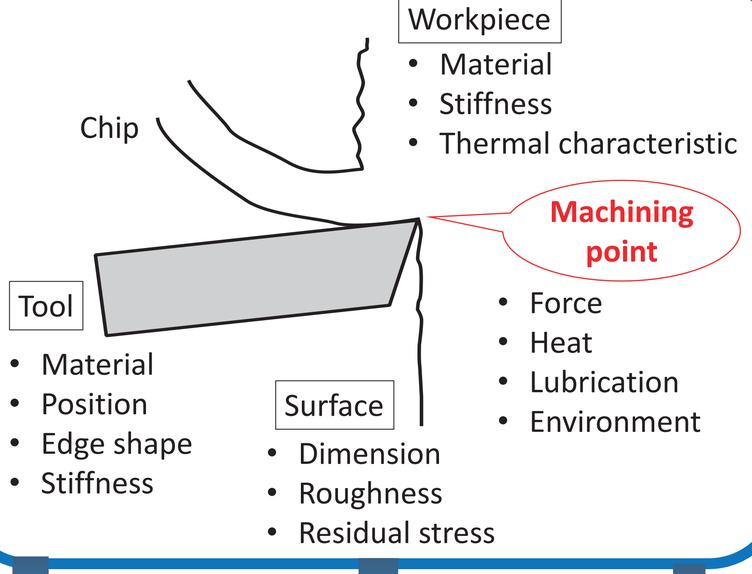
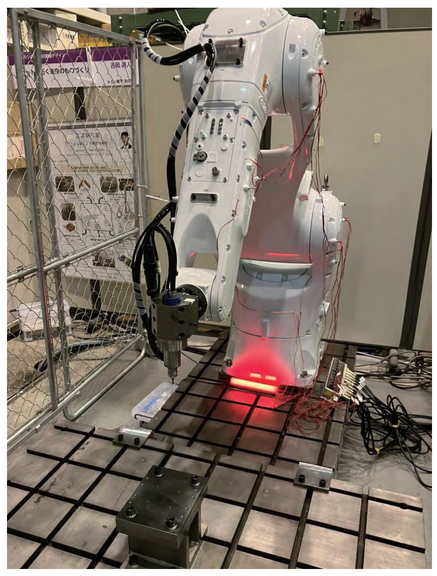


図４． 8 CQM_ImpによるFMS加工セルのスケジュール出力結果の例

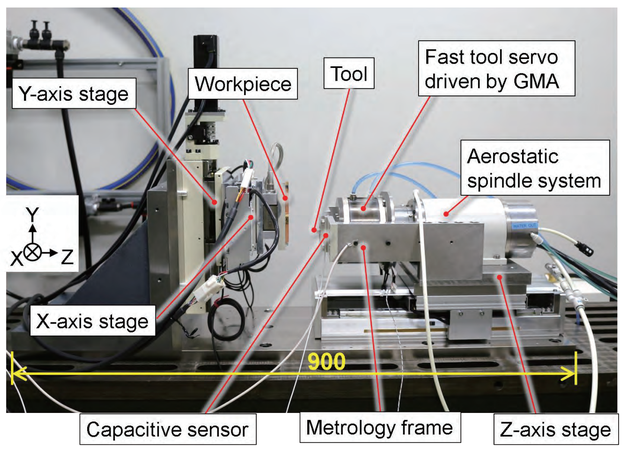
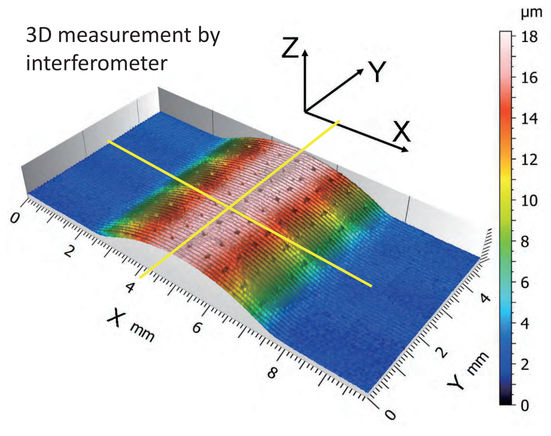
- Scheduling optimization
- Quantum Annealing Computation





Robotic automation system

- Robotic machining system
- Process automation
- Flexible manufacturing system

Fast Tool Servo for Milling process

- Axial Positioning of Cutting Tool
- Texturing on Curved Surface