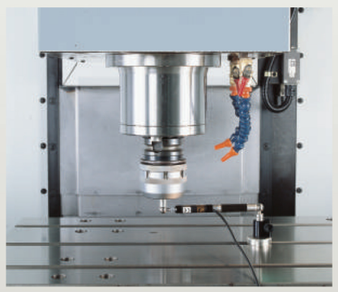
Advanced inspection equipment and technology

Finished goods inspection

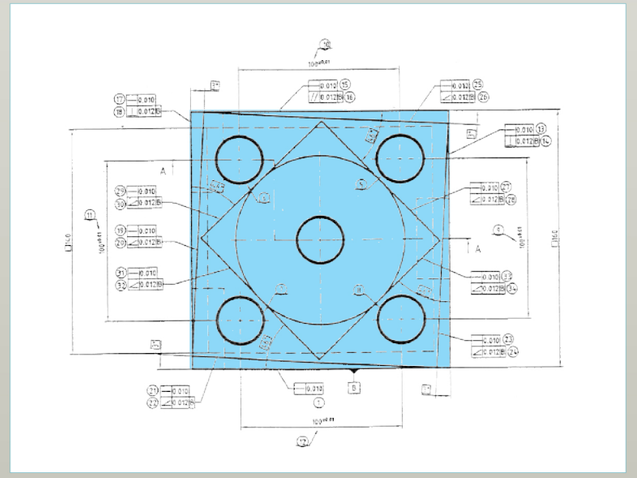
Laser inspection
Full travel movement accuracy is compensated by laser calibration compensation to ensure accuracy and calibration results of machine.

Spindle dynamic balance calibration
Calibrate spindle speed, displacement and acceleration characteristics of spindle at the highest RPM with IRD dynamic balance device.

Circle profiling test
Using circle profiling measurement instrument to calibrate true circle precision and geometrical accuracy of machine to test and ensure 3D motion accuracy.



Standard block test (dynamic cutting)



- In addition to measurement by precision instruments each machine shall subject to international standards compliant dynamic cutting tests.

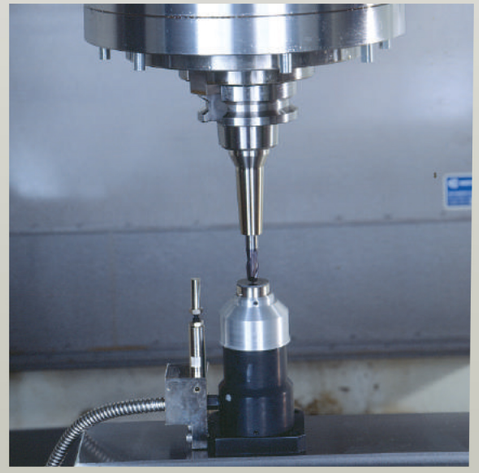
- The standard test blocks after machining shall subject to measurement by 3D CMM (Coordinate Measuring Machine) to ensure compliance of accuracy with standard.

Machine Equipped Measuring Devices

Workpiece Measurement System OP

- The Renishaw workpiece measuring system is installed.
- New generation OMP 60 optical probing system.
- The OMP 60 provides simple measurement, which can reduce the time for setting up the machine by up to 90%, reduce the reject rate, and fixture costs and improve the process control.
- The OMP 60 uses microelectronics and components, thus providing a compact structure.
- Optionally, the probe can be equipped with an OMI-2 interface receiver. The system uses state-of-the-art modulated optical transmission with excellent light interference resistance capability.
- The probe is equipped with a 360° infrared optical transmission system. The transmission distance is up to 6m and the probe can perform measurement from any direction.

Tool Length Measurement OP



- The automatic tool measuring system will measure the tool length and input the result into the controller automatically for compensation.
- Automatic tool measuring is controlled by macros, which can perform the measurement automatically and are easy to operate.

IR tool damage detector OP

- The IR tool damage detector is aimed to identify any damages to mini tools before machining and signal the NC controller to hold the next machining process.
- The IR tool damage detector beeps or flashes light indicators to in case of any tool damages found to enable operator's knowing about machining structure all the time.