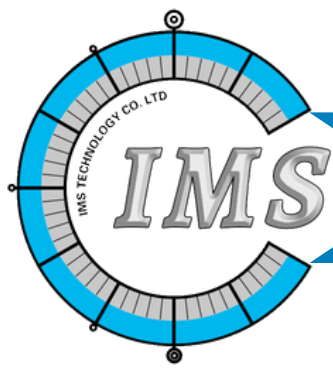




COORDINATE MEASURING MACHINE

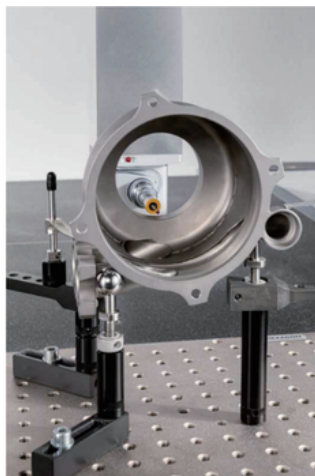
FEATURE

- The three-axis adopts high-quality granite with low thermal expansion coefficient, good temperature stability, resistance to effective deformation, and good rigidity.
- Adopting internationally advanced precision crossbeam technology to design the structure, it is lightweight, has a low center of gravity, strong rigidity, small dynamic error, and high stability.
- Adopting a reflective metal strip grating ruler, it has a thermal expansion coefficient similar to most workpieces, ensuring good repeatability accuracy.
- By adopting a high-performance three coordinate dedicated control system and professional 3D three coordinate measurement software, the reliability and anti-interference ability of the system are greatly improved, and maintenance costs are reduced.

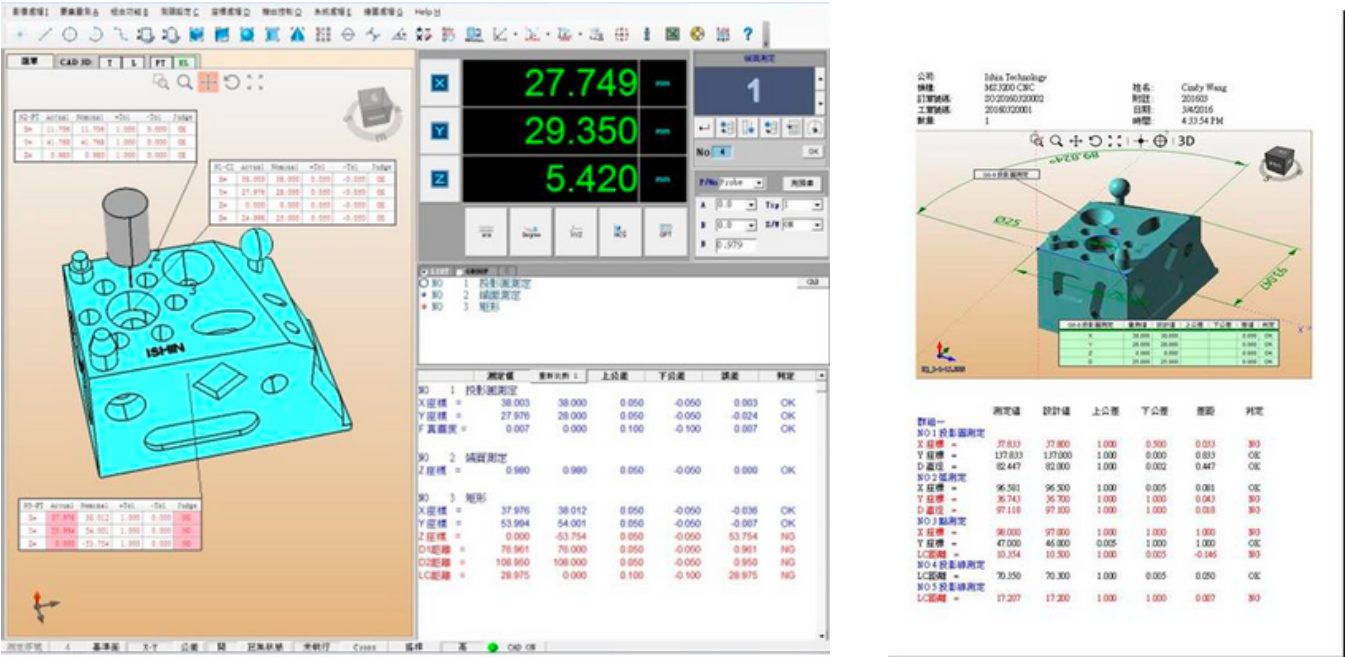


APPLICATIONS

Three coordinate measuring machines are widely used for measuring the three-dimensional dimensions of products in industries such as automobiles, electronics, machinery, aviation, molds, hardware, plastics, etc.



SOFTWARE



SPECIFICATIONS

Product Name	Small Coordinate Measuring Machine		Medium to large three coordinate measuring machine (supporting range customization)		
Model	CMM-544F/R	CMM-564F/R	CMM-686	CMM-8106	CMM-8156
X*Y*Z (mm)	500*400*400	600*500*400	600*800*600	800*1000*600	800*1500*600
L*W*H (mm)	1014*1015*2112	1114*1245*2112	1356*1940*2710	1556*2140*2710	1556*2540*2710
Weight (Kg)	500	750	1200	1600	1900
Load Capacity (Kg)	150	150	500	800	1200
Probe Selection	CMM-F: Fixed Probe CMM-R: Rotating Probe		Rotating Probe		
Probe Error (MPEP)	≤2.2 μm		≤2.4 μm	≤2.5 μm	≤2.9 μm
Indication Error (MPEE)	≤(3+L/300) μm		≤(3.5+L/300) μm		
Structural Design	Fixed Bridge Structure		Moving Bridge Structure		
Control Method	XYZ three-axis automatic control, software programmed measurement				
Scale Resolution	0.1 μm (metal tape scale)				
Air Supply Pressure	20.6MPa				
Power Supply	220v±10%/110v±10% (AC) 50Hz (Note: requires grounding with resistance ≤4Ω)				
Working Environment	Temperature: 20±2°C, Relative Humidity: 45~75%, away from vibration sources				

TP20 modular probe system allows you to choose the optimal stylus arrangement for accuracy... whatever your measurement task



TP20 probe system

The TP20 is a touch-trigger probe that gives its users the ability to change stylus configurations manually or automatically, without re-qualification.

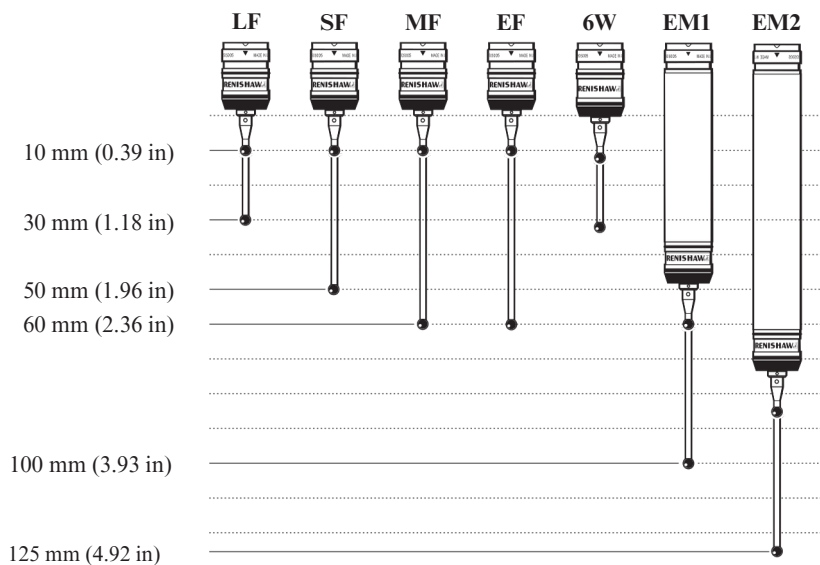
The TP20 is now widely accepted as the industry standard replacement for the TP2-5W probe, offering a range of new benefits. It can be easily retrofitted to manual and DCC co-ordinate measuring machines (CMMs).



The range of modules

A range of seven, application specific, stylus modules is available:

- The **low force module (LF)** for high accuracy with short stylus and delicate materials.
- The **standard force module (SF)** is suitable for most applications.
- The **medium force module (MF)** is suitable for vibration resistance when using longer styli.
- The **extended force module (EF)** is suitable for very large stylus arrangements.
- The **6-way module (6W)** for measuring grooves and undercuts, has significantly improved metrology performance over the TP2-6 way.
- **Two extension modules (EM1 and EM2)** improve reach and offer better metrology performance than using equivalent length styli.



TP20 probe body

- The TP20 probe comprises two parts – a probe body and a detachable stylus module which contains the kinematic touch sensor and carries the stylus assembly.
- The probe body has a standard M8 screw connector, which enables direct fitting to all CMMs with a Renishaw PH1, PH6, MH8 or PH10T probe head.
- Fitment to PH10M/PH10MQ and MIH probe heads is simply achieved using a Renishaw PAA adaptor.
- The probe body also contains a magnetic proximity switch to inhibit triggering of the probe during automatic module changing with the MCR20 module change rack.

TP20 NI probe body

- The TP20 NI probe body differs from the TP20 body in that it is not affected by magnetic fields.
- However, the probe trigger must be inhibited through the software during change cycles using the MCR20.

TP20 stylus modules

- The stylus module is connected to the probe body by a highly repeatable magnetic coupling. This enables the exchange of modules without the need to re-qualify the stylus tips, giving significant time savings for inspection routines.
- The kinematic coupling between the probe body and module affords some crash protection in the X and Y axes.