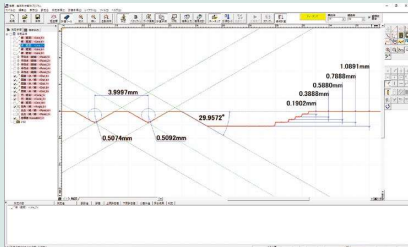


Example of 3D form comparison


QVH4 Pro

CNC Vision Measuring System equipped with Non-contact displacement sensor

- This dual system with a non-contact displacement sensor has a scanning function that enables measurement of minute height differences and 3D shapes.
- The non-contact displacement sensor (CPS probe) uses the wavelength confocal method.
- The LED used as the light source of the displacement sensor has an auto-brightness control function that enables seamless measurement of materials with different reflectivity.


QVH4 HYPER 606 Pro
Features: QVH4 Pro

- Enables detection of high inclination angles for both mirror and diffused surfaces.
- The automatic lighting adjustment function allows for high accuracy measurements.
- Surface roughness or thickness measurement of thin and transparent objects such as film.

COMMON SPECIFICATIONS

Items		Model No.	QVH4 APEX 302 Pro	QVH4 APEX 404 Pro	QVH4 APEX 606 Pro	QVH4 HYPER 302 Pro	QVH4 HYPER 404 Pro	QVH4 HYPER 606 Pro
Measuring range (X×Y×Z)	Vision		300×200×200 mm	400×400×250 mm	600×650×250 mm	300×200×200 mm	400×400×250 mm	600×650×250 mm
	Non-contact displacement sensor		176×200×200 mm	276×400×250 mm	476×650×250 mm	176×200×200 mm	276×400×250 mm	476×650×250 mm
Vision measuring accuracy*1	E _{UX} /E _{UY} , MPE		(1.5 + 3L/1000) μm			(0.8 + 2L/1000) μm		
	E _{UXY} , MPE		(2.0 + 4L/1000) μm			(1.4 + 3L/1000) μm		
	E _{UZ} , MPE		(1.5 + 4L/1000) μm			(1.5 + 2L/1000) μm		
Displacement sensor measuring accuracy*1*2	E _{Iz}		(1.5 + 4L/1000) μm			(1.5 + 2L/1000) μm		

*1 L=length between two arbitrary points (mm) *2 Inspected to a Mitutoyo standard.

CLASS 1 LASER PRODUCT
Safety precautions regarding QV HYBRID TYPE1

This product uses a low-power invisible laser (780 nm) for measurement. The laser is a CLASS 1 EN/IEC 60825-1 device. A warning and explanation label, as shown above, is attached to the product as appropriate.

QV HYBRID TYPE1

CNC Vision Measuring System equipped with Non-contact displacement sensor

- This dual system with a non-contact displacement sensor has a scanning function that enables measurement of minute height differences and 3D shapes.
- The double-pinhole technique is used as the detection method of the displacement sensor. It is less directional compared with the knife-edge and triangulation techniques.
- The small laser spot with diameter of about 2 μm makes it possible to measure minute shapes.

Features: QV HYBRID TYPE1

- The focusing point method minimizes the difference in the measuring face reflectance and achieves high measurement reproducibility.
- Capable of measuring detailed shapes in high resolution.

COMMON SPECIFICATIONS

Items		Model No.	QVH1 Apex 302	QVH1 Apex 404	QVH1 Apex 606	Hyper QVH1 302	Hyper QVH1 404	Hyper QVH1 606
Measuring range (X×Y×Z)	Vision		300×200×200 mm	400×400×250 mm	600×650×250 mm	300×200×200 mm	400×400×250 mm	600×650×250 mm
	Non-contact displacement sensor		180×200×200 mm	280×400×250 mm	480×650×250 mm	180×200×200 mm	280×400×250 mm	480×650×250 mm
Vision measuring accuracy*	E _{1X} , E _{1Y}		(1.5 + 3L/1000) μm			(0.8 + 2L/1000) μm		
	E _{1Z}		(1.5 + 4L/1000) μm			(1.5 + 2L/1000) μm		
	E _{2XY}		(2.0 + 4L/1000) μm			(1.4 + 3L/1000) μm		
Displacement sensor measuring accuracy*	E _{1Z}		(1.5 + 4L/1000) μm			(1.5 + 2L/1000) μm		

* Inspected to a Mitutoyo standard. L=length between two arbitrary points (mm)