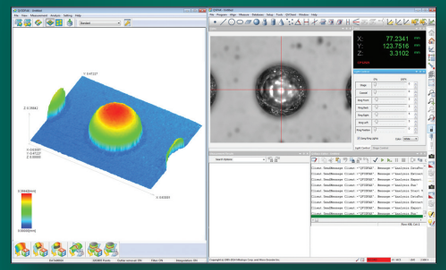
Analysis Software

QVPAK

QVPAK has evolved to the most powerful version yet with the QV Easy Editor. The modeless operation and concise simple interface require no specialized knowledge. Along with the proven power of QVBasic editor for customization and communication, QVPAK satisfies all user levels.

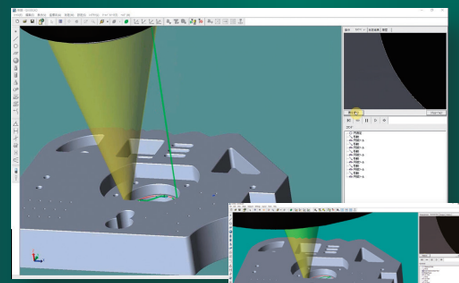
- All required measuring tool corrections can be made from the video window.
- Programming is fast, easy and interactive



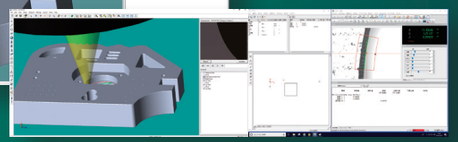
QV3DPAK

QV3DCAD

QV3DCAD creates a QVPAK part program from a 3D CAD model. The current version supports two modes: the online mode that allows you to teach while monitoring the actual workpiece by synchronizing the software with the QV system, and the offline mode that allows you to create a part program on a PC not connected to the main unit.



Offline teaching mode



Online teaching mode

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Introducing Mitutoyo's Full Line of Vision Measuring Equipment

Vision Measuring Systems

Manual

Quick Scope (Accurate to 2.2µm)
Manual Vision Measuring System

FOR MORE INFO

- XYZ measurement
- 0.1um resolution glass scales
- Motorized Z for fast automatic focus
- Quick-release stage movement for easy traversing over large area
- USB color camera
- Optical zoom system 8:1
- Full FOV measurement
- Triple source lighting is standard – Stage, ring, coaxial
- Five stage sizes up to 16" x 8" with 6" Z measurement range
- Fully programmable zoom and lighting
- Real-time editing
- SPC data macros and export included

Quick Image (Accurate to 3.5µm)
Telecentric All-in-Focus System

- Manual and motorized units available
- Stitching function for large parts
- Automatic part location and orientation
- USB color camera
- Quick release stage for fast movement
- Profile, coaxial, and 4-quadrant ring light standard
- Five stage sizes up to 16" x 8"
- Clear go / no-go measurement results

FOR MORE INFO

Automated

Quick Vision Active (Accurate to 2.0µm)
CNC Vision Measuring System

FOR MORE INFO

- Available in two sizes: 200 and 400 mm
- High-accuracy fixed-bridge design
- USB high-resolution color camera
- Newly designed zoom system with interchangeable optics
- Optional touch probe available
- 3D measurement system and software

Automated

QV Apex Pro (Accurate to 1.5µm)
CNC Vision Measuring System

FOR MORE INFO

- Available in three sizes 300, 400 and 600 mm, all achieving 1.5 µm accuracy
- High resolution camera
- Optional touch probe available
- Fixed-bridge design for maximum repeatability, acceleration, stiffness and accuracy
- Programmable ring light with parabolic mirror design and modifiable angle of incidence to maximize work-piece illumination
- Includes pattern focus optical enhancement hardware to measure translucent and reflective parts
- Optional Stream measurement available

QV Hyper Pro (Accurate to 0.8µm)
High-accuracy CNC Vision Measuring System

- Sub-micron (0.8 µm) accuracy vision measurement system
- High resolution camera
- Optional touch probe available
- High-resolution 0.02 µm scale system with ultra-low linear thermal expansion
- Programmable ring light with parabolic mirror design and modifiable angle of incidence to maximize work-piece illumination
- Includes real-time temperature compensation
- Includes pattern focus optical enhancement hardware to measure translucent and reflective parts
- Optional Stream measurement available

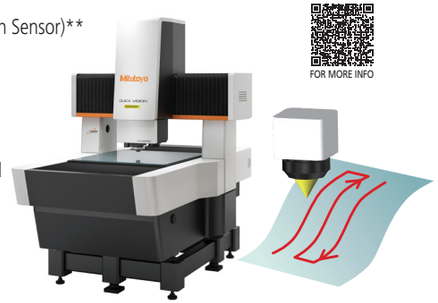
FOR MORE INFO

QV Apex Pro CPS Probe (Chromatic Position Sensor)**

FOR MORE INFO

- Chromatic confocal displacement sensor
- Uses chromatic aberration principle to achieve steep wall non-contact contour measurement
- High-mirrored and translucent surface measurement is possible
- Fully programmable unit with small spot size and long working distance to ensure high resolution
- Patented automatic lighting adjustment allows scanning of varying surface materials in a single setup

** Factory Installed option on Apex/Hyper



Advanced

MiScan Hyper (Accurate to 0.8µm)
Scanning Touch Probe

FOR MORE INFO

- Sub-micron (0.8 µm) accuracy vision measurement system
- High resolution camera
- Optional SP25 or MPP-NANO probe supporting a stylus ball diameter down to 125 µm
- High-resolution 0.02 µm scale system with ultra-low linear thermal expansion
- Programmable ring light with parabolic mirror design and modifiable angle of incidence to maximize work-piece illumination
- Includes real-time temperature compensation
- Includes pattern focus optical enhancement hardware to measure translucent and reflective parts

QV ACCEL (Accurate to 2.0µm)
Large-format CNC Vision Measuring System

- Moving bridge design uses high-speed acceleration with high throughput to meet production inspection needs
- Large-format stage with best-in-class accuracy
- High-resolution color camera
- Newly designed zoom system with interchangeable optics
- Vision and touch available
- Available in sizes up to 1,200mm
- 0.1 µm resolution glass scales
- Includes pattern focus optical enhancement hardware to measure translucent and reflective parts

FOR MORE INFO

ULTRA QV (Accurate to 0.25µm)
Ultra-high Accuracy CNC Vision Measuring System

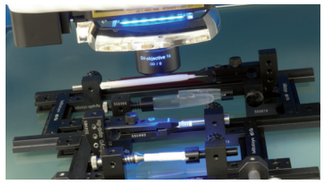
FOR MORE INFO

- Highest in-class accuracy of 0.25µm
- Minimize straightness errors with precision air-bearing linear guide system
- Scale resolution of 0.01 µm with ultra-low linear thermal expansion
- Halogen lighting with 3X magnification turret and interchangeable objectives
- Includes real-time temperature compensation
- Includes pattern focus optical enhancement hardware to measure translucent and reflective parts
- Optional touch probe available

Accessories

Fixture Kits
Opti-Fix Modular Clamping System for Optical Systems

Six unique kit designs for large and small workpieces. Safe and non-marking work-holding designed and manufactured by Mitutoyo. Support for flat, flexible and cylindrical parts with unobstructed access to the optical measurement path. Easy load, unload and setup.

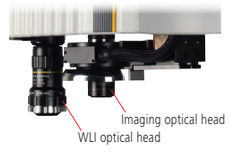


Sensor-Based

White Light Interferometer**

- Delivered on a hyper-accuracy platform.
- High-accuracy measurement of surfaces, roughness and analysis of line and space measurements of circuit boards / packages

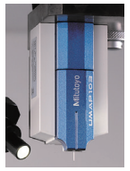
** Factory installed option



UMAP Probing System**

- Available micro-probe measurement systems are delivered on a hyper- and ultra-accuracy platform.
- Interchangeable microprobes from 15µm to 300µm in diameter
- Unmatched repeatability
- High-aspect ratio stylus family
- Ultra-low force measurements
- 3D measurement for micro geometry

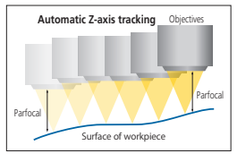
** Factory Installed option on Hyper/Ultra



Tracking Auto Focus (TAF)**

- TAF is a through-the-lens laser-based sensor that focus tracks Z surface to reduce or eliminate traditional move-and-measure video focusing
- Drastically improves measurement throughput

** Factory Installed option on Apex/Hyper

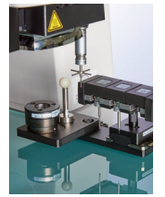


* Available with QV Apex series

Touch-Trigger Probe

Quick Vision Series models can be delivered or retrofitted with a touch-trigger probe that allows feature measurement of items unable to be measured by vision methods alone.
TP-20 or TP-200 probe types are available

- Kits include: calibration ring/sphere, rack, probes & modules



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