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 QV BasicEditor 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

**FormtracePak-AP** Profile Analysis Software

- Using the same full-featured software available with our form equipment, Mitutoyo provides this fully programmable 2D analysis comparison software.
- Compare to nominal CAD models
- Export to CAD for reverse engineering
- Graphical dimensional measurement and tolerancing
- Custom graphical reporting and layouts
- Full connectivity to MeasurLink SPC software

Contour-tolerancing in FormtracePak (optional)

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Find additional product literature and our product catalog

www.mitutoyo.com

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Note: All information regarding our products, and in particular the illustrations, drawings, dimensional and performance data contained in this printed matter as well as other technical data is to be regarded as approximate average values. We therefore reserve the right to make changes to the corresponding design. Since improvements, updates and developments of the products are made, we recommend that you verify the latest information with your Mitutoyo representative. Unless otherwise specified, any quotation is subject to change without notice.

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Vision Measuring Systems

Quick Scope
Manual Vision Measuring System
- XYZ measurement
- 0.1 µm resolution glass scales
- 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

Quick Image
Telecentric All-in-Focus System
- Single-click measurement
- Full FOV measurement
- Auto-part orientation recognition
- Large FOV 32mm (1.25")
- USB color camera
- Quick-release stage movement for easy traversing over large area

QV STREAM PLUS (1.5µm)
CNC Non-stop Vision Measuring System
- 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
- Vision and touch available
- Field retrofitable
- 3D measurement system and software
- 0.1 µm resolution glass scales

QV Hyper (0.8µm)
High-accuracy CNC Vision Measuring System
- Sub-micron (0.8 µm) accuracy vision measurement system
- High-resolution 0.02 µm scale system with ultra-low linear thermal expansion
- LED Illumination with interchangeable objectives to achieve high accuracy / high magnification measurements
- Includes real-time temperature compensation
- Includes pattern focus optical enhancement hardware to measure translucent and reflective parts

QV Apex (1.5µm)
CNC Vision Measuring System
- Available in three sizes 300, 400 and 600 mm, all achieving 1.5 µm accuracy
- 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

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 install option
*** Includes vibration dampering system

UMAP Probing System**
- Available micro-probe measurement systems are delivered on a hyper- and ultra-accuracy platform.
- Interchangeable microprobes: from 15µm to 200µm in diameter
- Unmatched repeatability
- High-aspect ratio stylus family
- Ultra-low force measurements
** Factory install option on (Hyper/Ultra)

CPS Probe (Chromatic Point Sensor)**
- 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 leveling adjustment allows scanning of varying surface materials in a single setup
** Factory install option on (Apex/Hyper)

Fixture Kits
Opti-Fix Modular Clamping System for Optical Systems
- Six unique kit designs for large and small workpieces. Safe and non-marking workholding 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.

ULTRA QV (0.25µm)
Ultra-high Accuracy CNC Vision Measuring System
- Highest in-class accuracy of 0.25µm
- Minimize straightness errors with precision air-bearing linear guide systems
- Scale resolution of 0.01 µm scale system 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

Quick Vision Active (2.0µm)
New Design CNC Vision Measuring System
- Up to 12x faster than conventional systems using strob-e-pulse illumination with image capture technique (DMM1200).
- Add TAF (Tracking Auto Focus) to provide automatic part Z-axis workspace focusing
- Automatic and asynchronous image processing
- Examples: electronic packaging, metal stamping and plastics
- Includes pattern focus optical enhancement hardware to measure translucent and reflective parts
- Measurable micro-probe measurement

Tracking Auto Focus (TAF)**
- TAF is a through-the-lens laser-based sensor that focus tracks Z surface to reduce or eliminate drift and drift/crock measurement of items
- Drastically improves measurement throughput
** Factory Install option on (Apex/Hyper)

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
- Available with QV Apex series

View Video
Accessories

Quick Vision Active (2.0µm)
New Design CNC Vision Measuring System

Data Color
- View Video
- View Video

www.mitutoyo.com/qva