Polytec

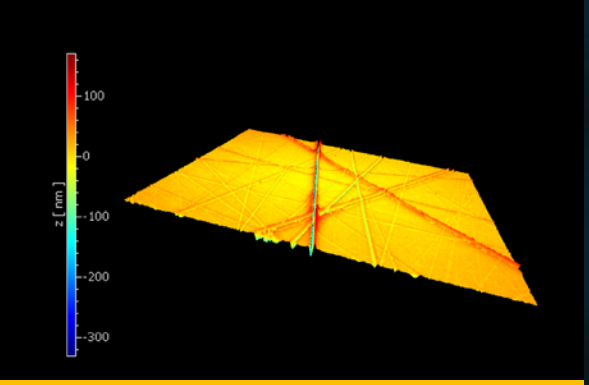
Polytec

Customer information

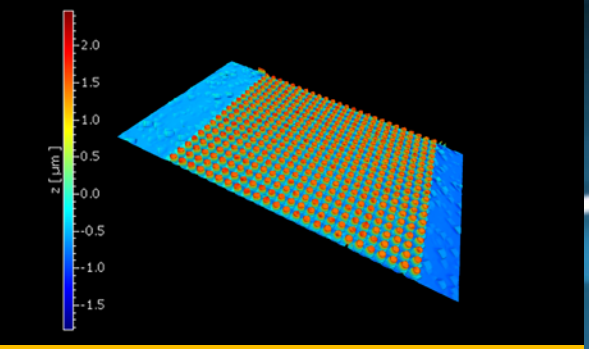
Xperts inside!

TopMap Micro.View® & Micro.View®+

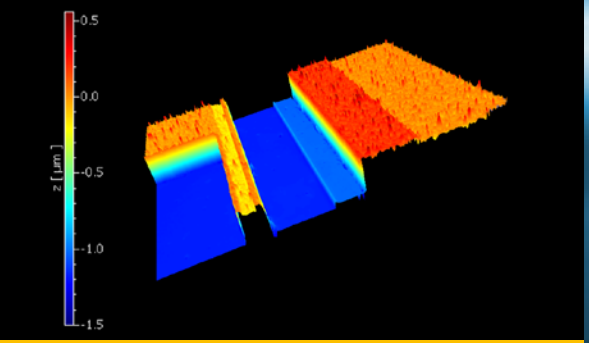
Optical 3D surface metrology



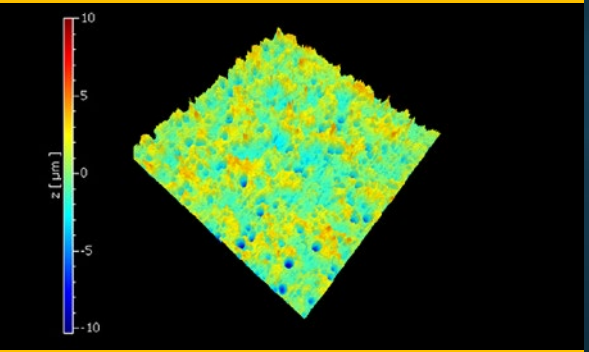
Measure surface roughness



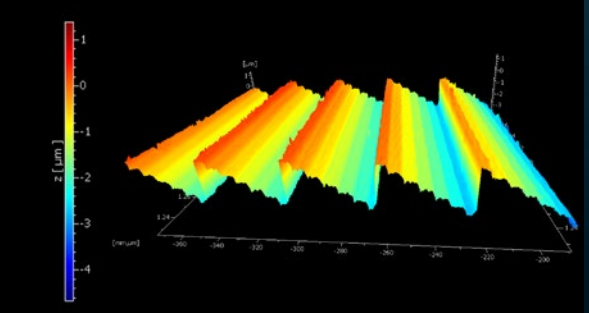
Analyze microstructures



Measure wafers



Material science / tribology



Characterize optical components

Non-contact characterization of surface details

For measuring the finest details in surfaces, the TopMap series of optical profiler systems are the preferred solution. From microscopes to macroscopes, Polytec has a product to meet the toughest of applications needs.

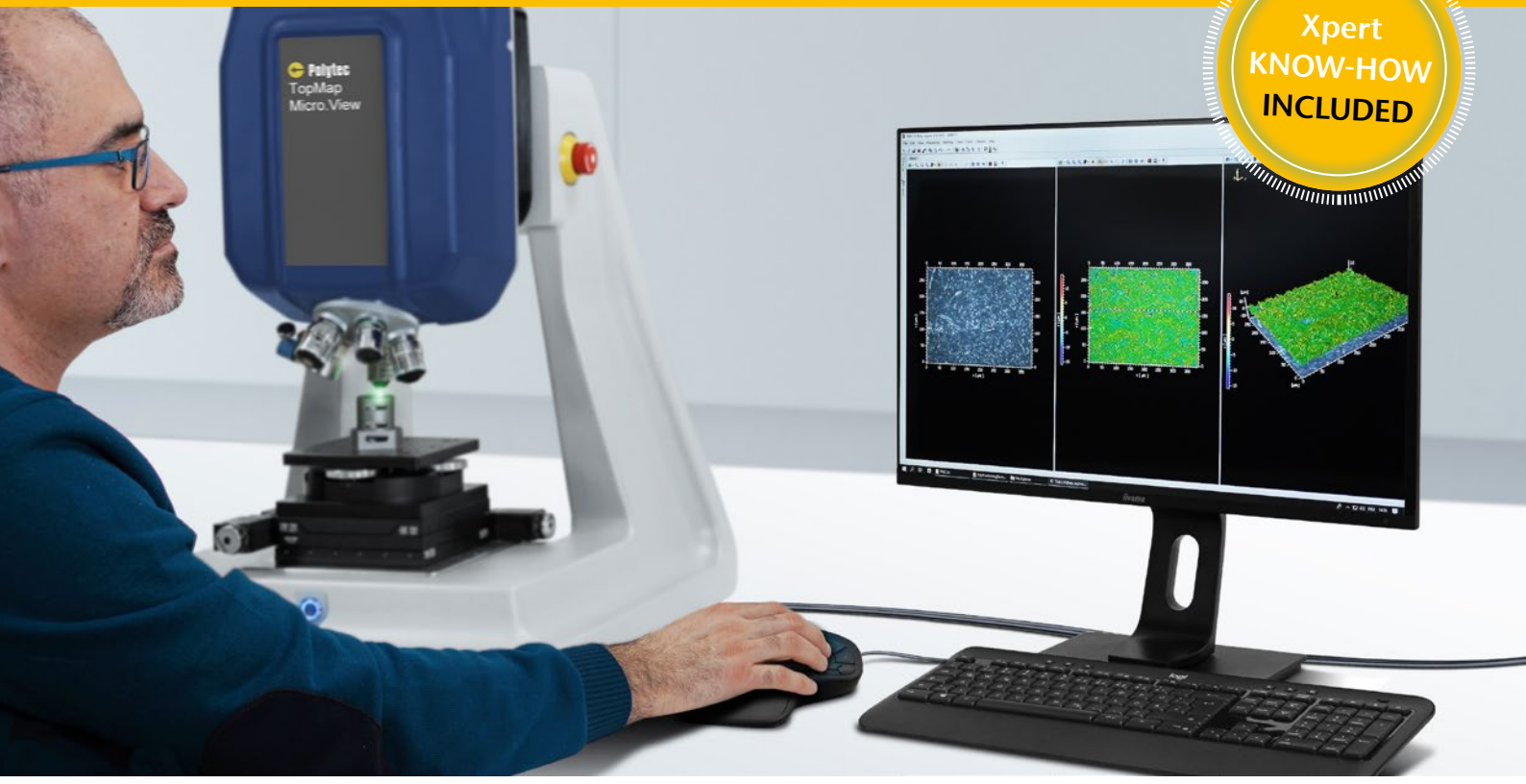
Since 1967 Polytec has continued to deliver leading edge optical measurement technology. The latest generation optical profilers, the TopMap Micro.View® and Micro.View®+ offer unparalleled capabilities. Analyze all types of surfaces for roughness, microstructures, wear, sealing performance and much more. The optical, non-contact topography measurement helps meet tight tolerances in precision engineering and raises quality control of functional surfaces to a whole new level.

!

Why measure with TopMap white-light interferometers?

- Non-contact, non-destructive and repeatable
- Real information in 3D from almost any surface
- High precision and reliability, easy to automate
- Excellent lateral resolution
- Excellent vertical resolution independent of objective magnification

Innovative optical surface profilers TopMap Micro.View® and Micro.View®+



Reliable, precise, innovative

Micro.View® and Micro.View®+ are the next generation optical surface profilers. The Focus Finder and Focus Tracker greatly enhance the ease of use under all conditions, and, the CST Continuous Scanning Technology allows for using the entire travel range of up to 100 mm as extended measurement range. Distinguish and document defects and visual distortions with the latest color information imaging analysis. Quantify surface topography with sub-nanometer resolution and capture the finest details reliably.

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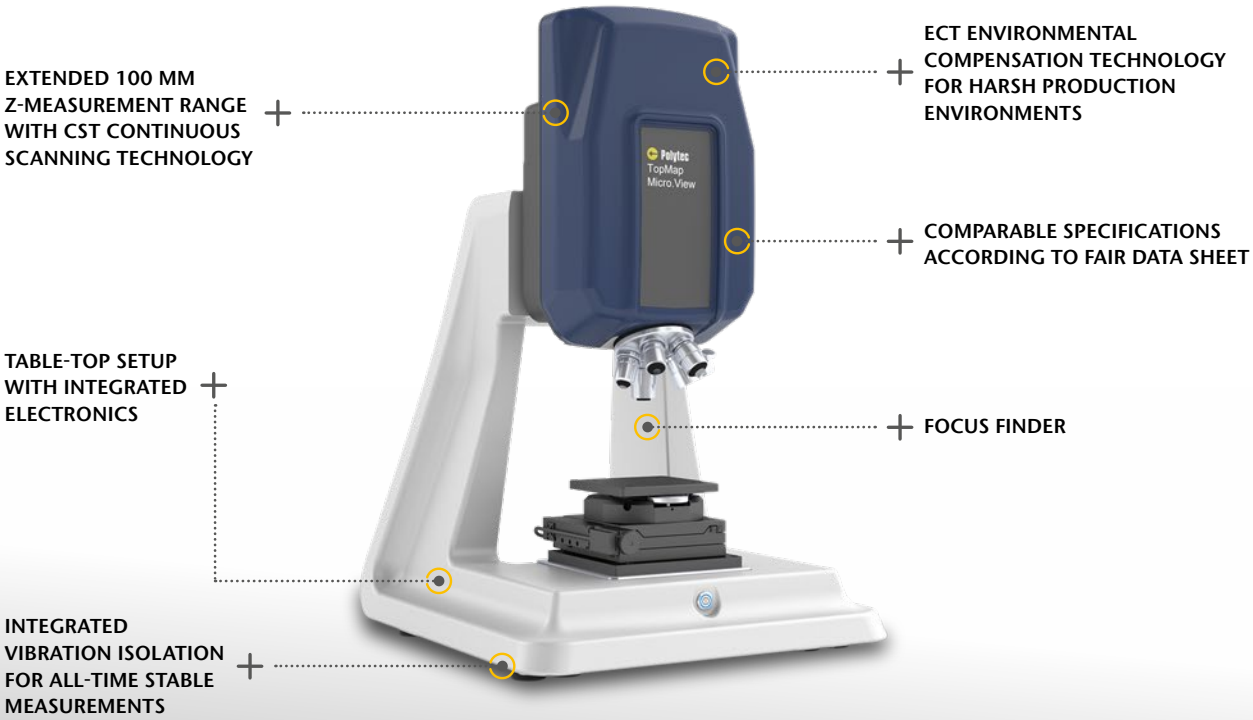
Join the PolyXperts network for expertise, service and support throughout any phase.

Learn more and visit
polytec.com/microview

TopMap Micro.View®
Table-top optical surface profiler



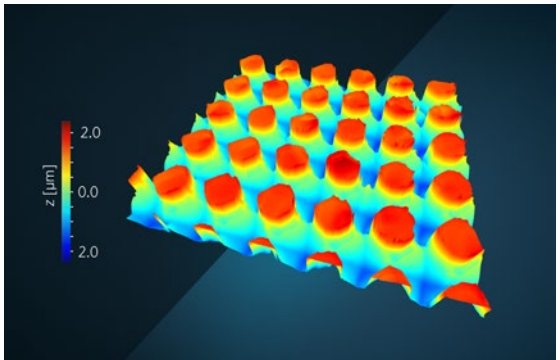
TopMap Micro.View® is an easy to use and compact optical profiler. Combine exceptional performance and affordability with this powerful metrology solution. An extended 100 mm Z-measurement range with CST Continuous Scanning Technology allows complex topographies to be measured at nm resolution.This convenient table-top setup features integrated electronics, with the smart focus finder simplifying and speeding up the measurement procedure.

Small footprint with expanded capability

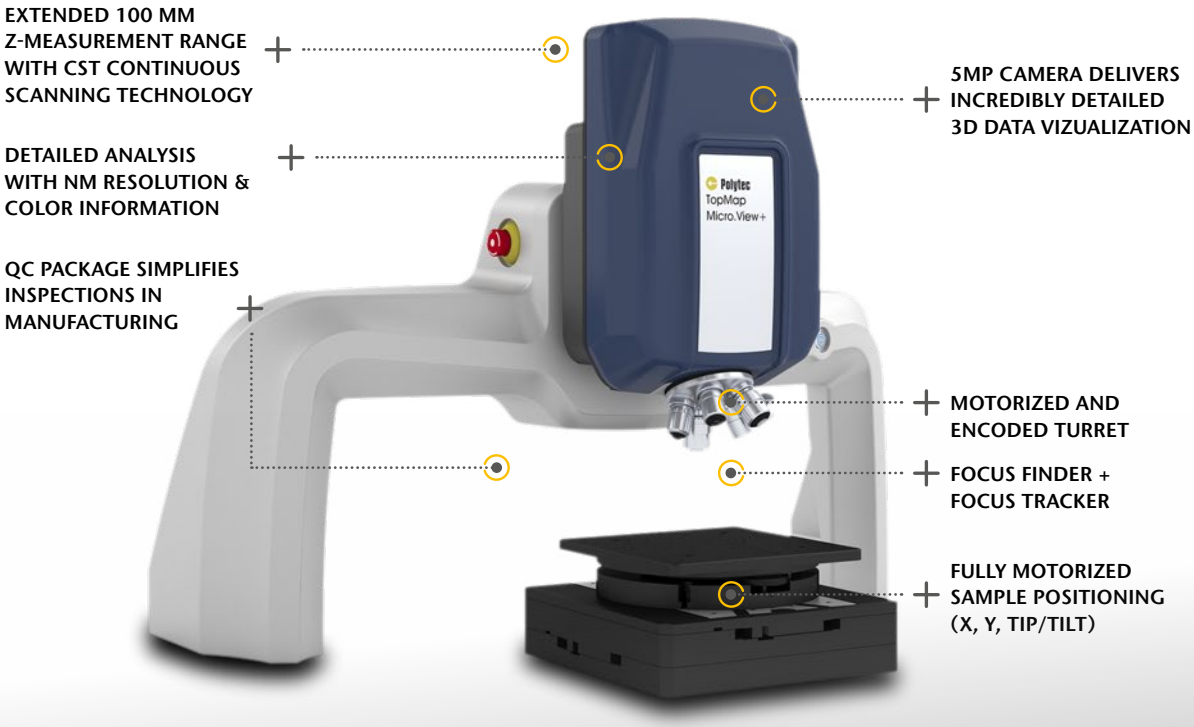
Benefit from the optional ECT Environmental Compensation Technology, securing reliable and accurate measurement results even in noisy and challenging production environments. Micro.View® is the cost-effective quality control instrument for inspecting precision engineered surfaces in the field of manufacturing and research.

Highligths

- Measure surface finish in a compact setup with nm resolution
- 100 mm Z-measurement range with CST Continuous Scanning Technology
- Cost-effective quality control solution



TopMap Micro.View®+
Next generation optical surface profiler



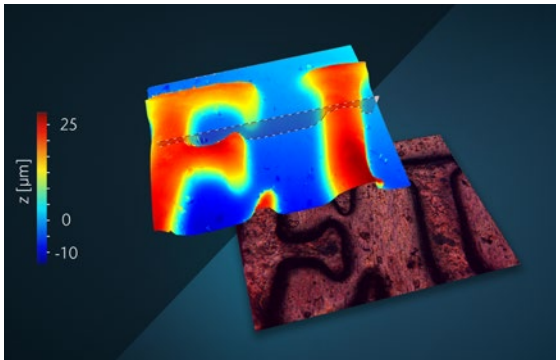
TopMap Micro.View®+ is the next generation optical surface profiler. Designed for modularity, this comprehensive workstation allows for customized and application-specific configurations. The Micro.View®+ delivers the most detailed analysis of surface roughness, texture and microstructure topography. Combine 3D data with color information for amazing vizualizations and extended analysis like detailed documentation of defects. The high-resolution 5 MP camera delivers incredibly detailed 3D data vizualization of engineered surfaces.

Automation enabled and production-ready

The encoded and motorized turret secures a seamless transition between objectives. Micro.View®+ also features the latest Focus Finder plus Focus Tracker, keeping the surface in focus at all circumstances. The fully motorized sample positioning stages allow for stitching and automation.

Highligths

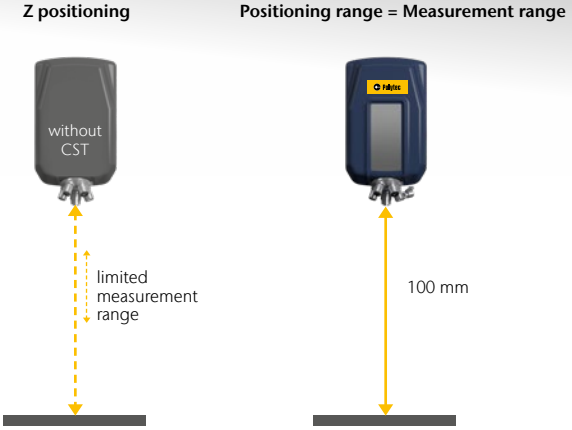
- High-end white-light interferometer with nm resolution
- With Focus Finder and Focus Tracker ready for automation
- Motorized X, Y, Z, tip/tilt and turret save repositioning



Precision measurement driven by innovation

01 CST Continuous Scanning Technology

With the integrated CST Continuous Scanning Technology, the optical profiler uses the entire travel range for measuring smoothly and continuously. This means more positioning freedom, faster setup and less maintenance.



Maximum flexibility in sample positioning

Benefits

- **Extended measurement range**
  High performance data acquisition for full range of motion
- **Precision Z drive**
  Part focus and measurement with one stage
- **Extended vertical range**
  Measure tall samples

03 Modularity & customization

Since all measurement environments are different, the modular concept of the Micro.View®+ allows customization to comply with individual requirements and even transform into a fully automated in-line quality control system.

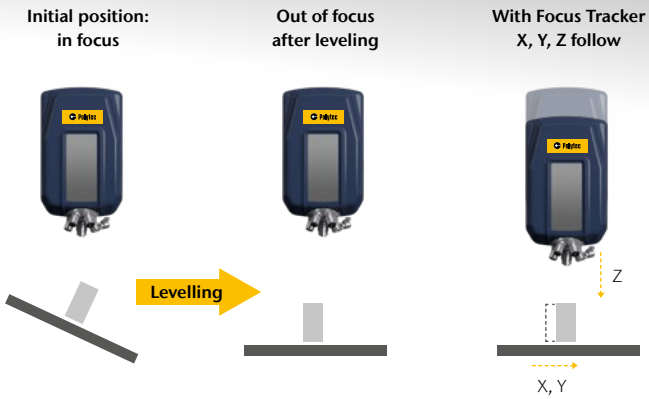
TopMap Micro.View®

TopMap Micro.View®+

Flexible heigths – for samples up to 370 mm

02 Focus Tracker

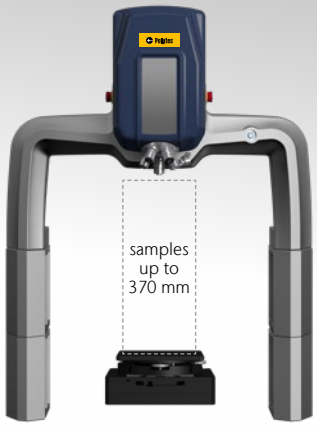
Keep the object surface in focus with automated readjustment and minimize time between measurements.
As a fully motorized configuration (X, Y, Z, and tip/tilt) the Micro.View®+ with Focus Tracker delivers repeatable and reproducible measurements in all positions.



Focus Tracker follows the measurement position

Benefits

- **Always in-focus/ automated re-adjustment**
  Automated focus tracking saves repositioning
- **Fully motorized turret, XY, Z, tip/tilt**
  Reproducible measurements



Integration in production lines

Benefits

- **Micro.View®:**
  Compact, table-top setup, ready to go
- **Micro.View®+:**
  - Modular concept for varying sample heights (samples up to 370 mm)
  - Head-only for in-line inspections, flexible and easy to integrate

Polytec TMS Software as complete solution

The powerful TMS Software (Topography Measurement System) offers an array of options as one-stop solution for surface analysis. The latest generation software suite acquires precision data and allows for a range of post-processing to highlight the parameter of interest. A few mouse clicks is all it takes to automatically run a measurement with pre-defined settings.

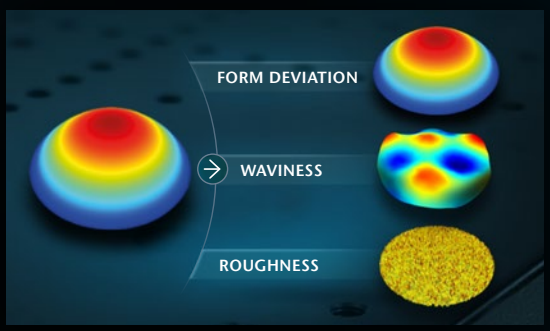
Now compatible with a barcode scanner, the complete measurement sequence can be automated with minimal user input.

Data acquisition

- POSITIONING
- MEASUREMENT
- ILLUMINATION
- SIGNAL

Setup the data acquisition in detail for repeatable measurement and traceable results. Generate, save and load acquisition settings with ease.

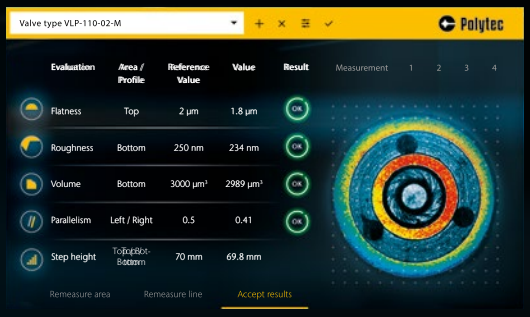
Data evaluation



Analyse 3D surface data with extensive set of surface parameters (including ISO 25178) and thanks to direct access to acquisition settings use them as further decision criteria for your analysis.

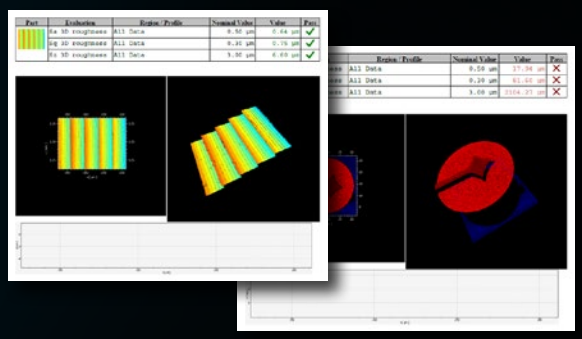
Easy customization and integration, fully developed and supported in-house

Automation



Pre-defined measurement recipes help reduce complexity with an intuitive user interface. The QC Operator Interface is ideal for routine and repetitive inspections.

Reporting

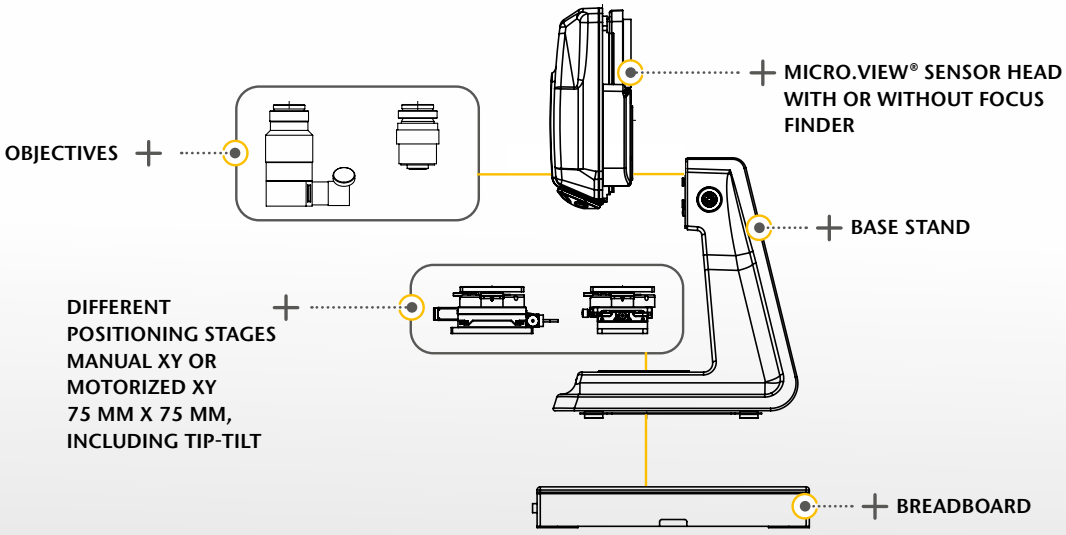


Generate and update reports concurrently with a simple set-up in the all-in-one TMS software. Ensure traceability by also recording evaluation steps.

Configuration of optical profilers

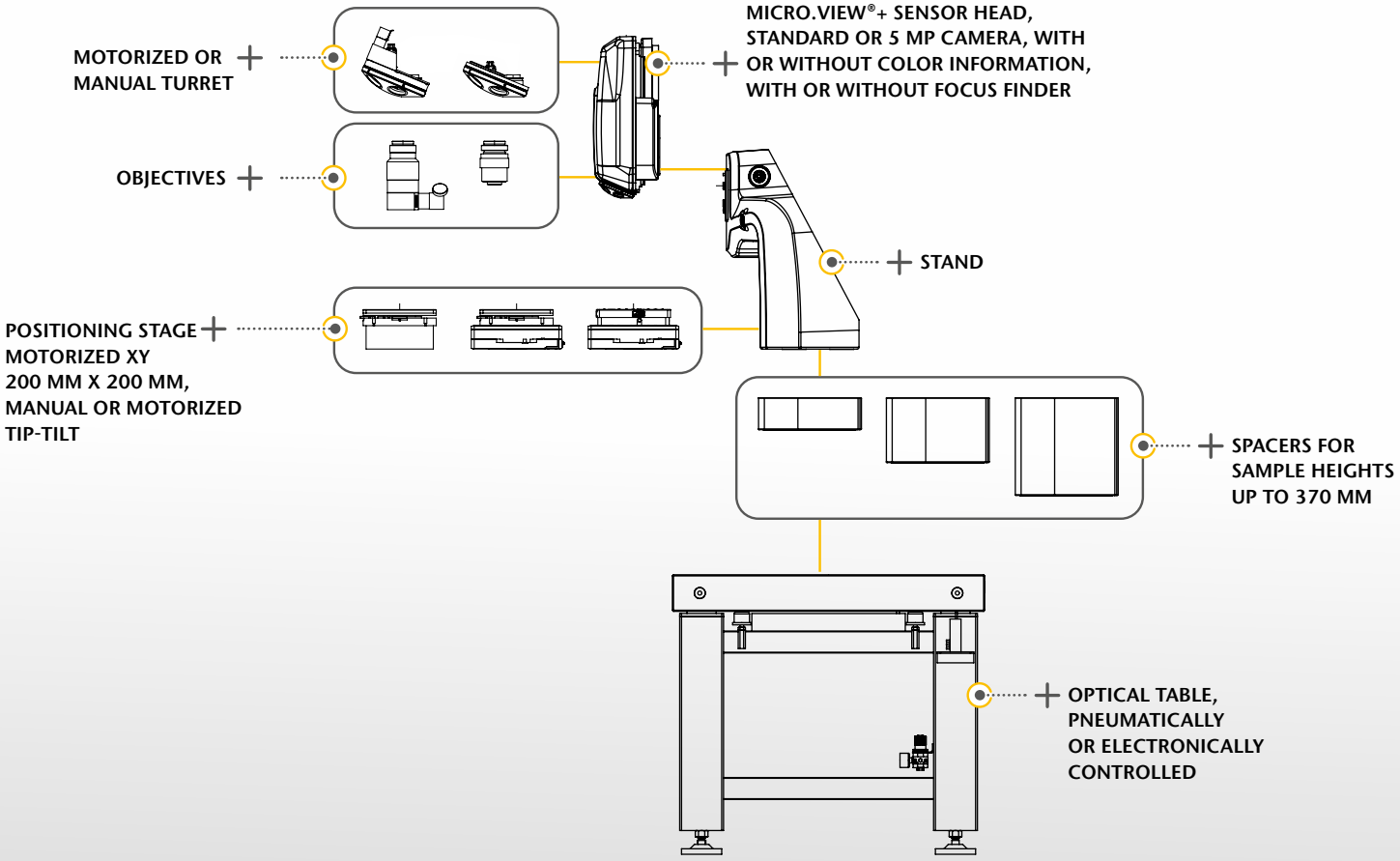
Micro.View®

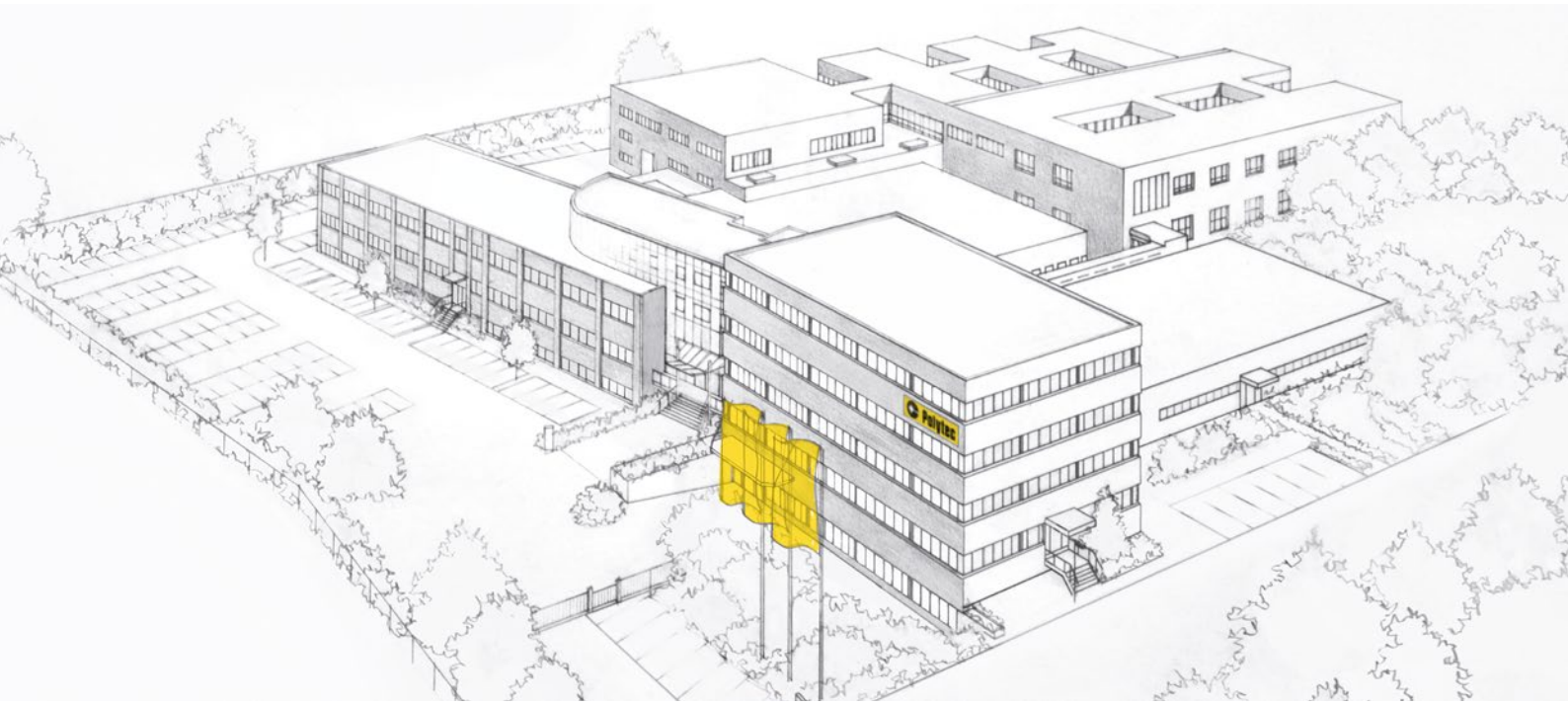
Table-top surface profiler



Micro.View®+

Modular profiler for comprehensive surface finish analysis





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