Polytec

NEW

TopMap
QC PACKAGE

Enhancing TopMap surface metrology
for quality control

TopMap surface metrology – quality control (QC) in production

Avoid false rejects in challenging production environments

Global standardization with simplified monitoring of measurement settings

QC Verifier

QC Setting Comparator

TopMap

QC Operator Interface

QC Protection Housing

One-click solution at the production level

Isolation from harsh production environments

PACKAGE

QC Software Customization

QC Barcode Scanner

for application-specific adaptations

Loading the right settings avoids operator failures

Avoid deviations and control your process

Reduce rejection rates.
Increase process capability.

CERTIFIED BY
TopMap
QC
PACKAGE

Industrial production benefits from tightly integrating surface metrology into the manufacturing process. Only then, the inspection feedback allows immediate and cost-efficient reactions. TopMap surface metrology systems from Polytec help adjusting manufacturing parameters, assure to stay within production tolerances and improve your process capability.

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TMS-500
TopMap Pro.Surf

"Are we really sure, this is a reject?"

UPPER LIMIT

LOWER LIMIT

QC Verifier
Avoid false rejects in challenging production environments

ECT
Environmental
Compensation
Technology

Reject only real defects and save money

Real-life production environments can be tough and challenging: noise, vibration or uncontrolled movement make measurements difficult on the factory floor, leading to false rejects.

Here, our QC Verifier comes into play. Its ECT Environmental Compensation Technology isolates your measurement from external influences.

!

Highlights:

- High measurement reliability under challenging conditions like in a machine shop
- Minimize influences from surroundings
- Avoid false rejects

QC Settings Comparator
Global standardization with simplified monitoring of measurement settings

schematically represented

RECIPE 1

Acquisition settings

A
B

FORM DEVIATION

WAVINESS

ROUGHNESS

Evaluation settings

A
D
C

RECIPE 2

Acquisition settings

A
B

Evaluation settings

A
E
C

!

Highlights:

- Traceability throughout all locations
- Global monitoring and standardization
- Fast diagnostics

Find the differences!

The QC Settings Comparator is a software package that compares different measurement recipes. It ensures that standard settings are applied and that manufacturing quality is consistent at all manufacturing locations - no matter where.

Motorized Tip/Tilt Unit
Control your movements – optimum measurement settings with one click

① SCAN RANGE   **②** SCAN RANGE

Simplified positioning

To achieve reproducible measurement results under challenging manufacturing conditions, it is essential to avoid error sources. With TopMap's new Motorized Tip/Tilt Unit, operator error is reduced using one-click positioning. Moreover, due to its self-positioning capability, the required scan range is minimized, substantially reducing measurement times.

!

Highlights:

- Reduced operator mistakes using one-click positioning and saves time
- Increased measurement reproducibility
- Simplified handling using motorized positioning

QC Protection Housing
Isolation from harsh production environments

Highlights:

- Smooth integration into the production
- Laminar flow box isolates the measurement environment, avoiding disturbances from the production environment

Reliable measurements under harsh conditions

Every single precaution that reduces production floor environmental influence contributes positively to QC measurement accuracy. Equipped with a laminar flow box and sliding door, the new QC protection housing protects against harsh production conditions.

QC Barcode Scanner
Loading the right settings avoids operator errors

Load the right settings

Use the QC Barcode Scanner for loading the correct predefined measurement recipe. This semi-automatic process saves time and avoids potential operator mistakes. Even complex 1D and 2D codes can be read with the handheld barcode reader. The included software module integrates with the Polytec software.

!

Highlights:

- Avoid operator errors by choosing the right measurement recipe for each sample types
- Increase your automation capabilities

QC Operator Interface
One-click solution at the production level

schematically represented

Valve type VLP-110-02-M									
Evaluation	**Area / Profile**	**Reference Value**	**Value**	**Result**	**Measurement**	**1**	**2**	**3**	**4**
Flatness	Top	2 μm	1.8 μm	OK					
Roughness	Bottom	250 nm	234 nm	OK					
Volume	Bottom	3000 μm^3	2989 μm^3	OK					
Parallelism	Left / Right	0.5	0.41	OK					
Step height	Top / Bottom	70 mm	69.8 mm						

Remeasure area   Remeasure line   Accept results

! Highlights:

- Management of different recipes – easy handling of different sample types
- Monitoring of measurement settings – more traceability
- Quick pass/fail overview
- Advanced reporting capabilities

Manage different samples with just one click

The QC Operator Interface module manages sample-specific measurement recipes. After a recipe is developed, it can be uploaded to the interface. Subsequently, the operator on the production floor can use it to perform a measurement with a single click.

QC Software Customization
for application-specific adaptations

Tailored to your needs

TopMap's TMS Software offers a wide range of features and options for routine measurements as well as for extensive and detailed surface analysis. However, in some cases, customized evaluation methods are required to meet task specific parameters, an application specific user interface and/or communication to other production machines. Ask for the QC Software Customization for individual solutions.

!

Highlights:

- Customer specific evaluation, parameters, user interface, etc.
- In-line measurement requirements: communication to other machines

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