

MARPOSS

QUICKSPC

SOFTWARE FOR PROCESS AND QUALITY CONTROL



Software

Quick SPC™ for Windows® is a suite of software products designed to comply with any requirement ranging from simple measurement acquisition to complex gauging applications. Framed in a simple, wizard driven, common user interface it is possible to complement the base product by means of software Add-ons purposely conceived for specialized industry fields.

Displacement Sensors



Product features

Templates and wizard driven programming interfaces allow an easy, safe and ready to use software.

Self explanatory with its spreadsheet programming interface, Explorer-like navigation and on-line manuals.

Mouse-free Interface.

Safe and reliable with checks on programmed data consistency, data back-up and restore utility; multi-level user security access.

Bore Gauges Line



REDEFINING THE CONCEPT OF FLEXIBILITY

Fully customizable software environment matching current and future metrological and statistical needs: page layouts, short cuts, hot tabs, application templates, reports, customers' based statistical evaluations and more.

Powerful and versatile capable of connecting to a variety of analog and digital measuring devices and machine tool CNCs.

Comprehensive fully integrated software modules for data acquisition, measurement elaboration, statistical analysis, machine tool compensation, network integration and data storage.

Forks and Ring Gauges



CONFIGURATION AND PROGRAMMING

Configurable display layout for content, color, position, size, text, fonts, menus. Mouse-free interface for operators, plus fully compliant Microsoft Windows display functionalities. Spreadsheet programming interface, Explorer-style user interface, integrated MS Access database. Consistency control routine for all configuration and programming phases.

Bench Gauges



MEASUREMENTS AND ZERO SETTING

Static and digital dynamic measuring cycles. Unlimited number of measuring steps and part programs. Manages analog sensors (LVDT, Half-Bridge), strain gage, linear and rotary encoders, digital probes, serial input devices and manual data input. Live measurement display and fully guided operator prompted acquisition sequences using multimedia files (bmp, pcx, jpg, avi, mpg, etc.). Fully automatic machine tool control (Feedback) and multiple stations control for assembly applications. Zero setting and Min-Max mastering with consecutive, cumulative drift controls and non-zero-band controls.

Indicators and Electronic Display Units



STATISTICAL PROCESS CONTROL

Configurable and programmable data evaluation complying with International (ISO), National (DIN, AIAG, CNOMO) and customers guidelines. Embedded Q-DAS® statistical package for on-line, variable data analysis (control chart, machine and process capability). Certified qs-STAT® compliant data storage.

Interface Boxes for Data Acquisition



MEASURING SYSTEM ANALYSIS

Accuracy, Repeatability, Reproducibility, Linearity, Stability studies complying with International (ISO), National (DIN, AIAG, CNOMO) and customers guidelines. Fully programmable prompted acquisition sequences in both blind and full details measure mode. Measuring System Analysis traceability by storing each study separately together with all necessary references. Data evaluation can be run through Marposs® Measuring System Analysis (MSA) software module (option). Analysis can be seamlessly run through QDAS® MSA software package as well.

Software



NETWORK

An ODBC-compliant data structure allows seamless integration to virtually any network client and data base architecture, including all the main Industrial Fieldbus.

UTILITIES

Step Sequencer Designer to create multi-level operator prompts, instruction and data acquisition pages. Serial Driver Programmer connects to virtually any serial device using ASCII-based protocols. Analog Probes Tuner (APT) to set-up sensors assembly when more than one sensor is used to create a measurement. Groups and Users to define multi-level password access, operator based software modules, displays, short cuts, hot tabs, icons, soft-keys. Customizable reporting and printing.

LANGUAGE VERSIONS

Change Language module allows to select among the following languages: English, French, German, Italian, Swedish, Portuguese and Spanish. Other language versions available upon request.

Minimum Requirements

Quick SPC™ requires a Marposs Industrial Computer (model E9066) or any Windows® compatible PC, with:

- Operating System Windows 10™ or Windows 7™
- A minimum of 4GB RAM (recommended 8GB for Windows 10™)
- 1028x768 XVGA display or bigger
- At least 3GB of free hard disk space.



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THE PRODUCT LINE

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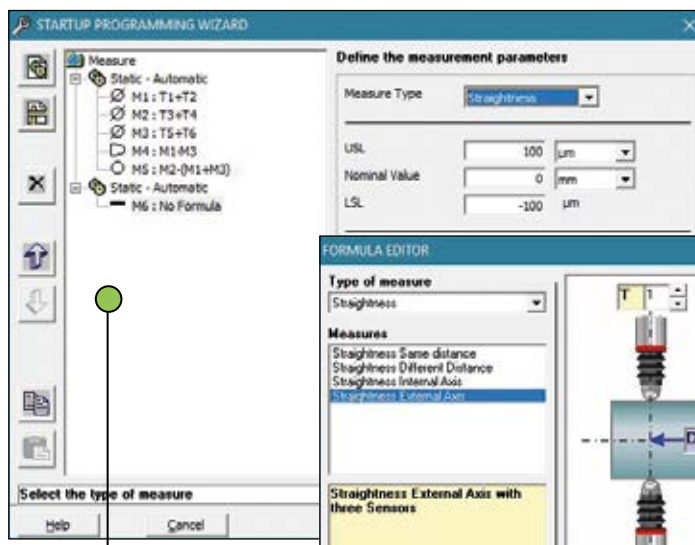
Indicators and
Electronic
Display Units



Interface
Boxes for Data
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Software



WIZARDS

- Simple wizard-driven interface for easy data programming
- Context sensitive measurements definition and formula creation
- Integrated graphic tool editor to create operator prompts and instructions

WORKING GRID

- Spreadsheet programming interface
- Completely customizable visualization
- Quick and safe template-based programming
- MS-ACCESS database environment

PROGRAMMABLE TOPICS

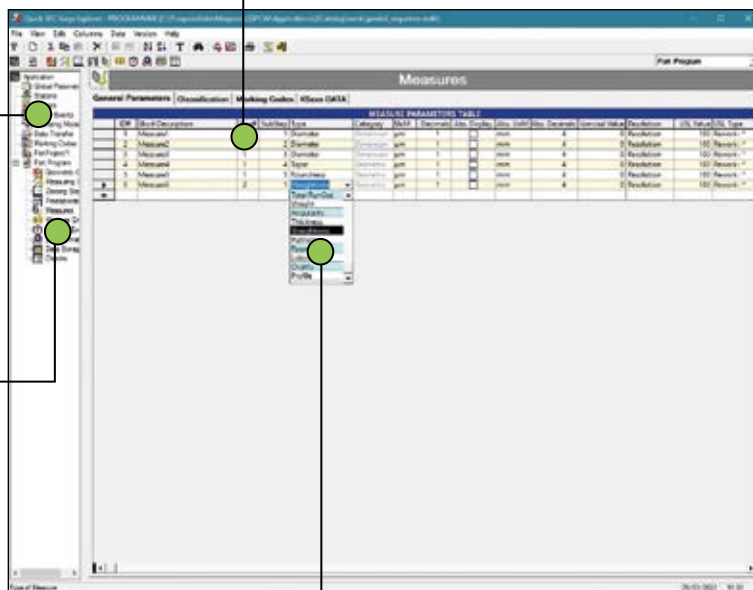
- MS-Windows® Explorer-style structure
- Intuitive organization of all arguments
- Direct access to all topics

STATISTICAL ANALYSIS

- Embedded Q-DAS® statistical software for on-line control charts, machine and process capability analysis
- Q-DAS® qs-STAT® compliant data storage

GUIDED PROGRAMMING

Guided programming using Online help, tooltips, pick-up lists, Wizards, etc.

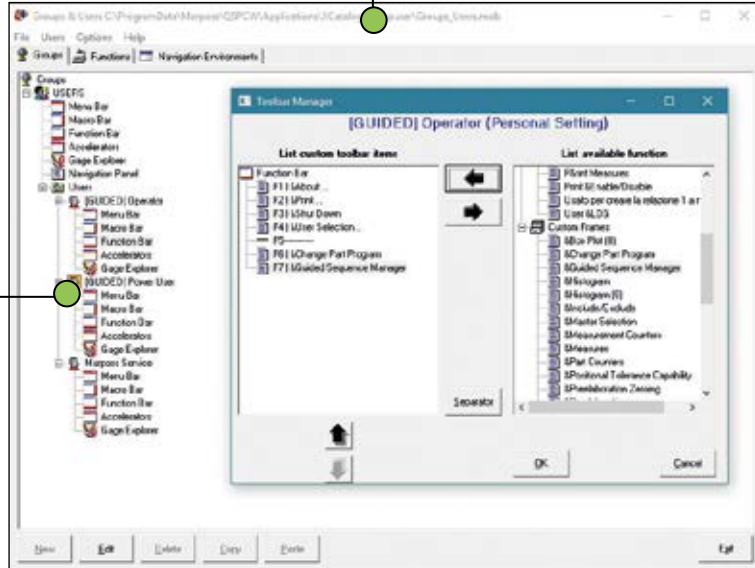


GROUPS & USERS

Assignable groups/users rights, functions, hot tabs, function keys and accelerators

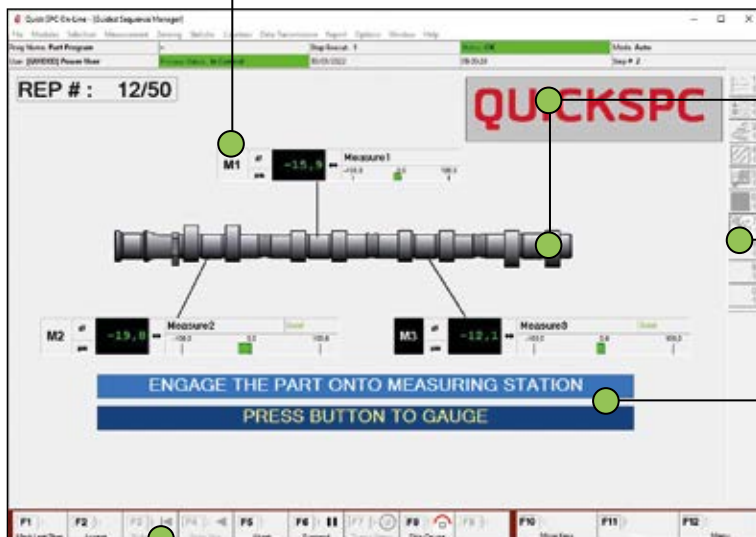
SECURITY

Separate groups/users profile management guaranteed by password validation



ON LINE

- Customizable display
- Clear and readable information
- Measurement bargraph, numeric and color code displays



MULTIMEDIA

Static and dynamic files (picture, drawings, videos, etc.)

HOT TABS

- Freely programmable
- Direct selection view
- Mouse free

OPERATOR PROMPTS

- Instructions
- Data acquisition
- Capability studies (gage, machine, process)

FUNCTION KEYS

- Customizable
- Pictorial helps
- Application dependent
- Mouse free

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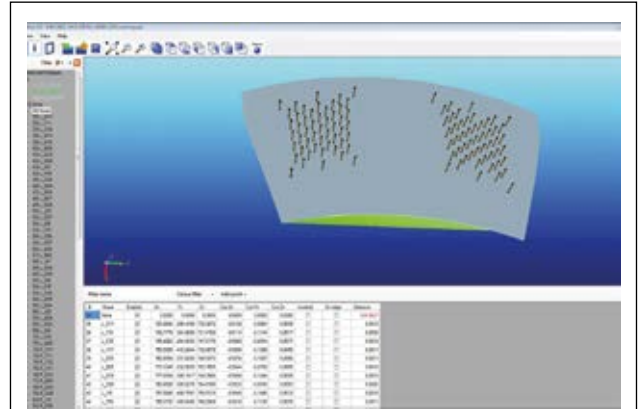


Glass AddOn

The Glass AddOn is a software specifically developed for the automotive glass industry. It allows to manage all the glass measurements (shape, flatness, bending, symmetry, perimeter, etc..).

Intuitive programming through 3D file

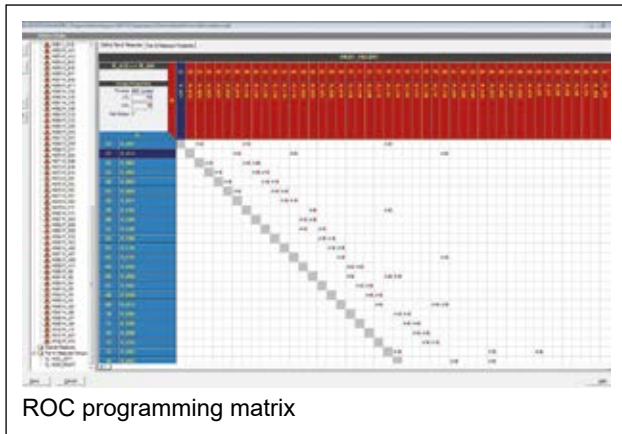
The measurements can be easily and quickly programmed by importing the 3D drawing of the glass following the programming wizard. User friendly interface and high precision measurement page. The measuring page is based on the 3D file; file ensures the visualization of the glass with high accuracy. The results can be easily understood thanks to a configurable display layout showing all measurement values. Colour coded measurement groups help linking the results to the real position on the glass. Additional pages for statistical evaluation are available.



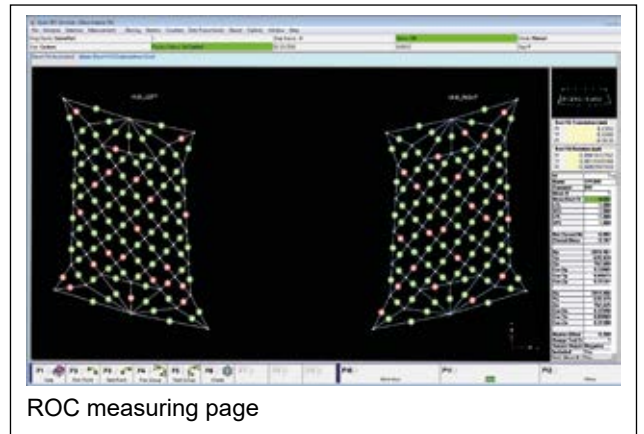
Programming interface through 3D file

Rate of change (ROC) elaboration

ROC is dedicated to take under control the shape of the glass. In particular it is very useful to measure the HUD area where a perfect flatness surface is a must to grant high quality images. In addition ROC can be also applied to measure the bending angle of the glass close to the border (attack angle).



ROC programming matrix



ROC measuring page

Different data transfer formats

Many formats available as standard (for example: CSV, TXT, Q-DAS®, Renault, PSA). Customised data format exportable through any industry network (Industry 4.0 ready) available on request.

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Opto AddOn

Optoquick is the Marposs product line dedicated to precision measurement of workpieces in the manufacturing environment. Optoquick delivers a superior balance between measurement performance, speed and flexibility. It gives an unrivalled measurement performance in terms of accuracy, repeatability and stability.



FAST & PRECISE

For complete part quality validation in a few seconds

FLEXIBLE

Able to gauge multiple parts with a single system

OPTICAL & CONTACT

No matter what the specific measuring challenge is!

EASY TO USE

For efficient and fast measuring tasks

INDUSTRIAL

Able to operate on the shop floor with the best performance

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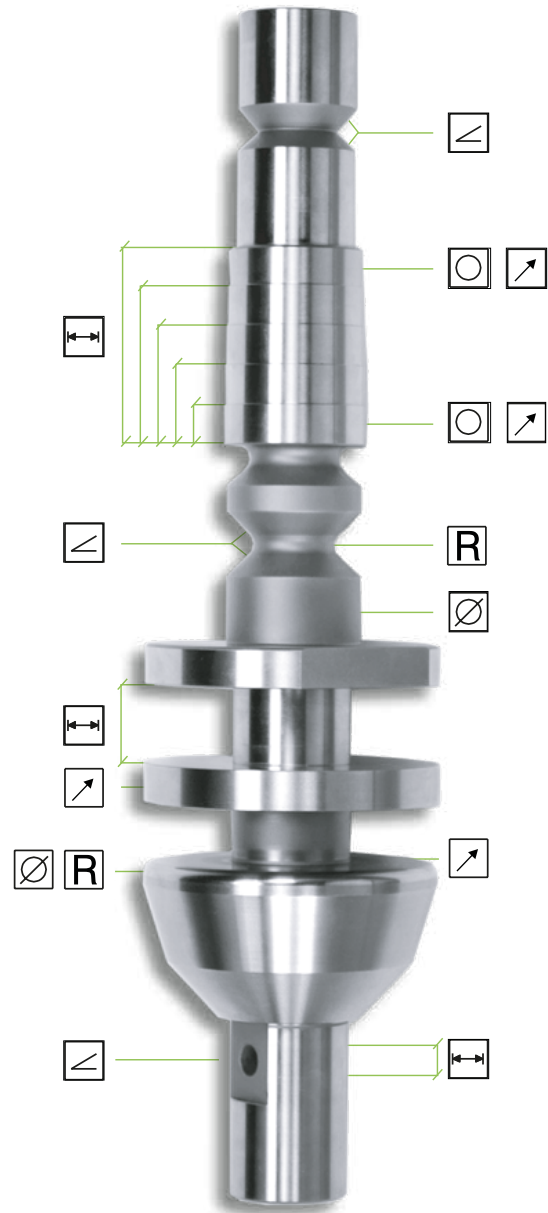
HIGH PRECISION GAUGING IN THE PRODUCTION PROCESS

- CAM SHAFTS
- CRANK SHAFTS
- GEAR SHAFTS
- DRIVE SHAFTS

TYPICAL MEASURING TASKS

Dimensional, position,
form measurements

- Diameter
- Length
- Radius
- Chamfer
- Angle
- Radial run-out
- Axial run-out
- Concentricity
- Cylindricity
- Coaxiality
- Straightness
- Roundness
- Flatness
- Symmetry
- Parallelism
- Perpendicularity
- Cam profile
- Stroke and index



HIGH PRECISION GAUGING IN THE PRODUCTION ENVIRONMENT

Leading edge core technologies with full MARPOSS design. Optoquick delivers a superior balance between measurement performance, speed and flexibility. It is the perfect solution for the manufacturing environment. It gives an unrivalled measurement performance in terms of accuracy, repeatability and stability. It has been tested and proven in the hardest environmental conditions. Should large temperature changes be encountered, dynamic temperature compensation may also be incorporated.

EASY TO USE

Optoquick is fast and easy to use and requires no extensive training. Part loading is ergonomically developed giving an open and clear loading area with no obstructions. Operator safety is guaranteed by using optical safety barriers. The graphical interface is carefully designed to give clear measurement results that show any part non-conformances on a clear visual part layout. This reduces operator training and increases productivity.

SIMPLY FAST

Optoquick is designed to perform comprehensive quality checks on parts within a few seconds. Image based technology assists in providing a short cycle time. Parts are measured while in motion and using intelligent image processing. Optoquick can inspect several different features on the part at the same time. Fast quality checks with Optoquick results in higher productivity and optimizes production capacity.

SUPERIOR EFFICIENCY IN OPERATIONS

Optoquick helps operators with fast and accurate quality checks directly alongside machine tools. This reduces the “work-in-progress” by eliminating the time wasted for transporting parts to dedicated inspection areas.

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Interface Boxes for Data Acquisition



Software



Gears AddOn

The Gears AddOn package aims to expand the functionalities of Quick SPC for Windows® in order to make an application for the inspection of gears with double-flank method easy to realize and use.

The main effects coming from the installation of the "Gears" AddOn are:

- Additional programming topics for the QuickSPC programming environment
- Additional display pages for the QuickSPC On-Line environment
- COM component for FFT (Fast Fourier Transform) reckoning functions

A part may include several gears. Marposs gearing meters can check all of them simultaneously. Each gear of a part requires a specific master.

The control programming can be achieved via a Wizard-Driven easy-to-use programming interface.



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Profiles AddOn

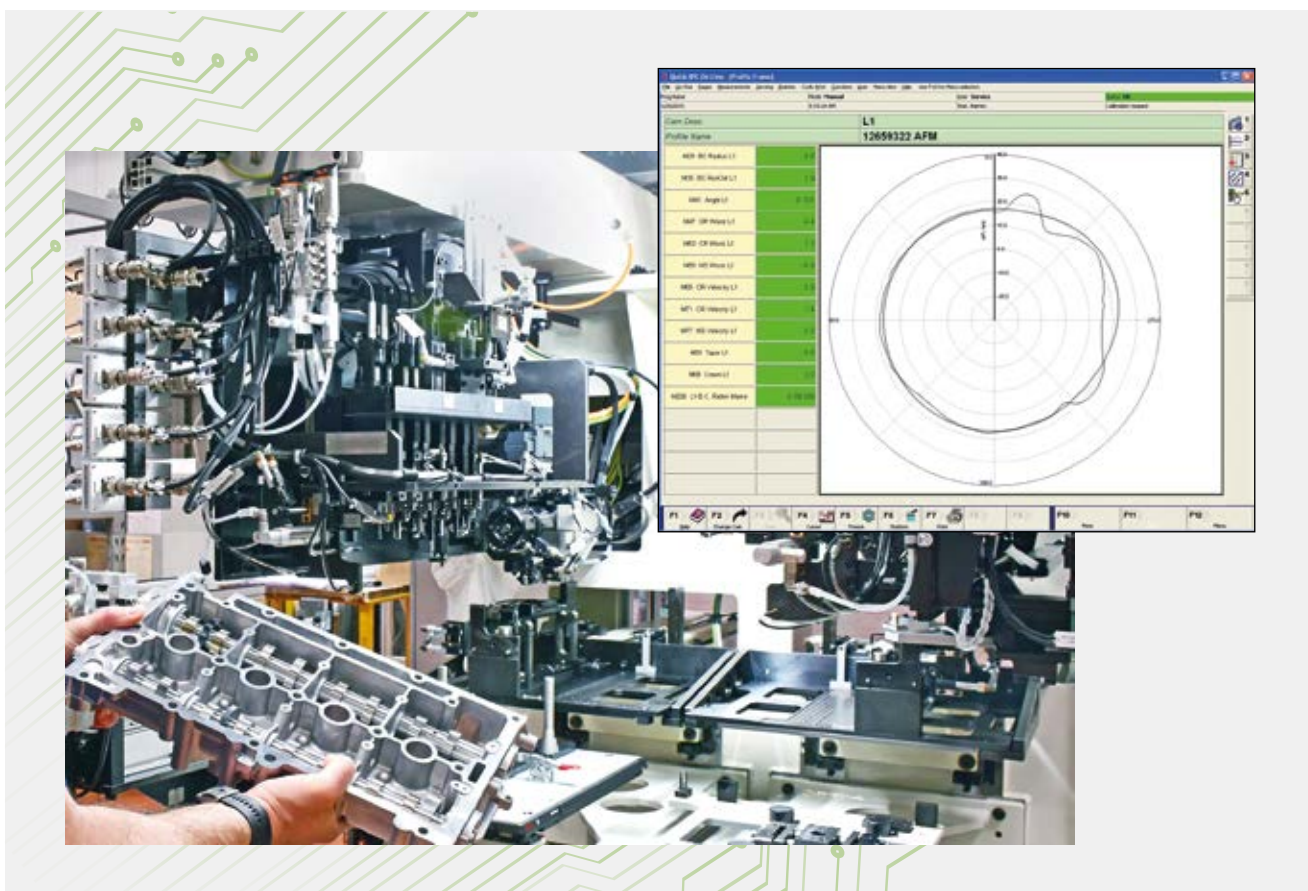
The Profiles AddOn package aims to expand the functionalities of Quick SPC for Windows® in order to realize and use an application with check of cams profile easily.

The main effects coming from the installation of the "Profiles" AddOn are:

- Additional programming topics for the QuickSPC programming environment
- Additional display pages for the QuickSPC On-Line environment
- COM component for profiles elaborations
- COM component for FFT (Fast Fourier Transform) reckoning functions

The following checks are typically available:

- Base circle radius
- Run Out of the base circle
- Profile error
- Profile velocity error
- Cam phase angle error
- Cam conicity
- Cam crown
- Cam chattering



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Scanning AddOn

Scanning technology is an essential tool for making dimensional and form checks on matching mechanical parts with very tight clearance tolerances. The richness of metrological data and the immediacy of the graphical representation of the surface profiles enable you to fully control the critical production processes of these components.

It guarantees the best repeatability and accuracy required for the measurement of very precise mechanical components like injectors, pumps and hydraulic valves.

The main effects coming from the installation of the Scanning AddOn are:

- Additional programming topics for the QuickSPC programming environment
- Additional display pages for the QuickSPC On-Line environment
- COM component for profiles elaborations

The software provides:

- Graphical display of the surface profile
- Double profile display for the clearance check (using Marposs M39S Twin Station version)
- Zoom functions available in the axial and radial directions, for a more detailed display of the profile
- Manual exploration of the total profile
- Facility to display the measuring point diagram beside the profile display
- Facility to store and export files containing the measured profile data



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