

Improvements Metro**soft QUARTIS** [®] R13

At a glance

Metrosoft QUARTIS R13 offers a wide range of improvements for all users and significantly contributes to optimize daily metrology work.

Metrosoft QUARTIS R13 offers users that measure sheet and plastic parts decisive advantages when displaying the results on graphical measurement reports. Surface and curve deviations can be evaluated statistically. The resulting trend and histograms can be displayed together with the statistical parameter within the corresponding labels.

Metrosoft QUARTIS R13 offers an advantageous and unified operation for the evaluation of further standardized inspection features. Results are already displayed in the graphics via the live preview during the evaluation.

Metrosoft QUARTIS R13 exports results of multiple measurements into a clearly arranged table. Feature and statistical data can easily be exported into an Excel spreadsheet. Thus a further universal applicable and configurable data interface is available.

Metrosoft QUARTIS R13 contains new interfaces for external databases and machines. Optionally, Microsoft SQL Server database can be used. The CMM-OS interface allows operating Zeiss measuring machines. The new optical 3D sensor PHOENIX II is seamlessly integrated.

Metrosoft QUARTIS R13 is compatible with Windows 10 and therefore ready for new PC hardware.

Metrosoft QUARTIS R13 offers, besides the updated CAD interfaces, many additional improvements and extensions. You find more information on the following pages.

Note:

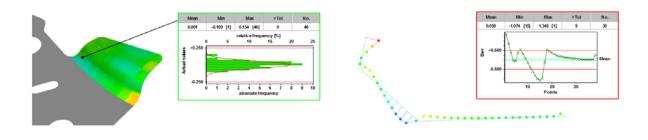
Some improvements are not included in the standard product Metrosoft QUARTIS R13 and require additional, chargeable modules. These are described in the document "Products and Modules Metrosoft QUARTIS R13".



Intuitive reports with statistical information

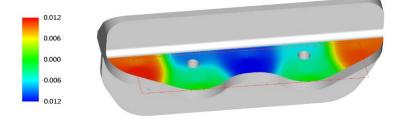
Output of statistical data of a surface or curve

You want to have a statistical statement about the quality of the measured surfaces and curves of your work pieces? The deviation of the individual probe points are displayed in the report as histogram or trend diagram. The diagrams can be completed with the common statistical parameters. Layout and labels are individually definable.



Display deviations with color gradient directly on the CAD surface

You like to display the deviation of measured surfaces using a color gradient? The color gradient is now displayed directly on the CAD surface. The coloring of the surface now runs to the surface borders. Inside contours, such as bores, are left out.



Highlights

- Output of statistical surface or curve data via a histogram or trend diagram
- Display deviations as color gradient directly on the CAD surfaces
- Texts within data labels can be read better the vertical centering has been improved
- The line height can now be set in the layout for tables and data labels
- Additionally to the feature filter, the measurement filter is now also recorded into the program
- Graphics view is built up faster and displayed in a higher resolution

Improvements Metrosoft QUARTIS R13

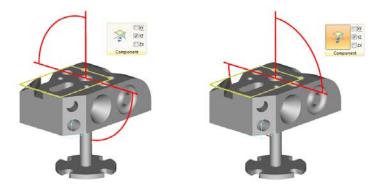
Standardized feature evaluation and export statistical data

Advantageous, unified operation within the ribbon with live preview

Eight additional features are now evaluated via the ribbon, resulting in significant advantages when measuring, programming and editing.

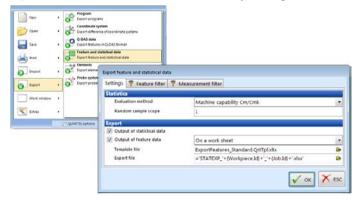
Evaluate ang	jle 2D								
Parame	ters								
1	▼	CYL_1 ▼ …	XX 🗌						
		PLN_1	VIZ VZ	90.017°	90.000°	UTol 0.050°	LTol -0.050°	0.017° 34%	
		<u> </u>	₩ ZX	90.060°	90.000°	UTol 0.100°	LTol -0.100°	0.060° 60%	
Feature		Element	Component	Actual	Nominal	Tolera	ance	Deviation	

When evaluating 2D angles, a live preview is displayed in the graphics. It clearly displays which angles between the elements are evaluated.



Export feature and statistical data into Excel file

You want to display the results of multiple measurements in a clearly arranged table? Feature and statistical data can now be easily exported into an Excel spreadsheet. Layout, contents and format are defined via an Excel template file and are therefore individually configurable.



Highlights

- Unified and advantageous evaluation of form, size, half size, position, angle 2D, angle, turning point and position dAB via the ribbon
- Live preview of evaluated angle ensures correct application
- Excel export creates an universal applicable and configurable interface



External databases, additional machines and PHOENIX sensor

Microsoft SQL server databases

Measuring and system database of Metrosoft QUARTIS can now also be stored on Microsoft SQL database servers. Multi user capability and the possibility to store large amounts of data are the main advantages in relation to the default Microsoft Access based desktop databases.

CMM-OS interface for Zeiss machines

In order to use Zeiss measuring machines with triggered probe systems, the CMM-OS interface is now available. This interface is comparable to the I++ DME interface, Metrosoft QUARTIS is connected as client to the CMM-OS software (server).

Optical sensor PHOENIX II

The new optical 3D sensor PHOENIX II is seamlessly integrated in Metrosoft QUARTIS. It measures in only one pass quickly and without contact holes and edges on sheet metal and plastic parts as well as geometric elements and surfaces on parts of different materials.



Highlights

- Multi user access and large amounts of data due to Microsoft SQL database server
- Connect Zeiss machines via CMM-OS interface
- Additional probe heads via I++ DME: Hexagon DEA CW43, Renishaw PHS1, expanded generic probe head and via CMM-OS: Zeiss DSE, Zeiss RDS (incl. CAA)
- Non-contact measurement with PHOENIX II sensor

Metrosoft QUARTIS is Windows 10 compatible



You use the new Microsoft operating system Windows 10? Metrosoft QUARTIS is compatible with Windows 7, Windows 8 / 8.1 and Windows 10. Supporting Windows 10 also includes numerous improvements in the 3D graphics. Graphical elements such as network grid, coordinate cross, color spectrum and mouse pointer coordinates are displayd correctly with Aero design activated.

Highlights

- Aero desktop design supported
- NVIDIA Optimus technology graphics card supported
- Antialiasing in the graphics is automatically activated

Additional improvements

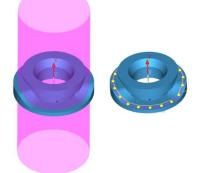
The following useful functions have been added in Metrosoft QUARTIS R13:

- The following CAD interfaces have been updated to the current version:
 - CATIA V5 (R8 R25)
 - CATIA V6 (R2015)
 - Inventor (V11 2016)
 - Parasolid (10 28)
 - Siemens NX (NX1 NX10)
 - Solid Edge (V18 ST8)
- You want to **automatically calibrate probe systems** included in a program. The probe systems contained in the programs are taken over into the calibration list and can be calibrated easily and task-related.

Reference	1101 Taster D=2 mm /l ▼ …			1101	0.00000°	°0.00000°	*	1	
Length	136.21307 ø1.99105		5	1102	90.0000	90.0000		<u> </u>	
Group	1	Program	Matrix	1103	90.0000	180.000	_	Delete	
oroup	1			1104	00.0000	00.000			
Calibration list									

- The **material thickness compensation** is now available for all element types except for the element "Curve". With the elements Circle, Rectangle and Slot, the material thickness "on reference" is automatically taken from the selected reference element. In case an erroneous material thickness has been defined or the material thickness input was forgotten, one can edit the material thickness value subsequently.
- When **Scanning** and probing individual points with scanning probe systems, several optimizations increase the accuracy. Scanning speeds between 0.1 and 200 mm/s can be set in the dialog. The target deflection of the sensors is entered as percent to the minimal / maximal deflection.
- Intersecting the CAD model with a defined cylinder creates a **cylinder intersection curve**.

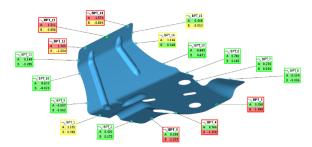




- The **Q-DAS export** ensures the compatibility with Metrosoft CM. This applies to the fields K2001 "feature number" and K2002 "feature description".
- The operation of the **selective parameter modification** has been improved. The selection is now set in the new program settings where, additional to "Projection onto CAD", "Intermediate point", "Probe system" and "Articulating probing system" can be selected.



• **Info labels** within the graphics have been completely revised and fitted with several new functions:



Info labels can now be moved and repositioned with the mouse.

Info labels of non visible elements can be hidden.

- The command DMESW / COMAND, 'SETCOORDSYS, WCS, ASPCS' is now supported in DMIS programs.
- The **execution of measuring programs**, that calculate a lot of features and thereby call many coordinate system commands, has been accelerated.
- The automatic temperature compensation on machines with Renishaw UCC-Server has been improved. The temperature is not refreshed periodically but as for the "WENZEL WPT 100" by the user.
- The new Renishaw REVO-2 probe head can be selected in the QUARTIS configuration for the graphical display.

Work piece Materials	 Temperatures 	Sensors			
	т	[°C]	Tc [*C]	alpha [10-6 1/K]	
Work piece	26.3	0	24.3	11.300	•
X axis	24.3	0	24.5		
Y axis	243	0	24.5		•
Z axis	243	10	24.5		
				🗸 ок	Xe

• The **Start of a remote support session** supporting screen to screen support, is now available via a hyperlink on the desktop or via the Windows start menu or directly in Metrosoft QUARTIS.



• In the startup window, **News** from WENZEL are displayed.



Metrosoft QUARTIS uses the inevitable startup time to show recent user information.

Clicking on the link brings you to the entire information on the WENZEL Metromec Website.

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 $Improvements_QUARTIS_R13_EN_20AF05 \mid @ WENZEL Metromec AG \\ Subject to technical modification and to changes in scope and design.$