

Improvements WM | Quartis R2018-2

Update Information

Vartis



At a glance

WM | Quartis R2018-2 offers a wide range of improvements for all users and significantly contributes to optimize daily metrology work.

WM | Quartis R2018-2 simplifies and improves the operation in the program work window. This allows programs to be edited more efficiently. All in all, you need fewer mouse clicks to get to your destination faster. Working with several programs in parallel is clearer and easier. The split view allows you to see what is being processed before or after the execution of a program.

WM | Quartis R2018-2 offers new fields and functions in the expression editor. With the new fields, you can output information about the WM | Quartis version and the active measurement database in a measurement report. Date/time information can be formatted as required. The EXTRACT string function can be used to extract specific values from a list with separators. In combination with the IncludeText function, values can also be read from a CSV file.

WM | Quartis R2018-2 calculates new elements based on existing elements with mathematical formulas. Elements can now be completely defined by expressions.

WM | Quartis R2018-2 names the elements in components with mould cavities, pins, drilling patterns, etc. descriptive and practical. The automatically proposed element IDs are generated according to a configurable pattern.

WM | Quartis R2018-2 improves the operation in the graphics work window. The measuring sphere is displayed exactly at the actual position, regardless of the configuration. A keyboard shortcut accelerates switching between different graphics tools. Moved info boxes can be reset to their original position in one operation.

WM | Quartis R2018-2 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 WM | Quartis R2018-2 and require additional, chargeable modules. These are described in the document "Products and Modules WM | Quartis R2018-2".



Measuring programs: Simplified and improved operation

You create and edit measuring programs and also use subprograms. The operation in the program work window has been improved and simplified. This makes editing programs more efficient and faster.

Edit program: Double click for direct editing

Program sentences can be edited directly by double-clicking, without first having to activate the editing mode.

Program display: Changing the view to other programs

While editing, recording or executing a program, you can switch to other programs that are already open. This is helpful and useful in many situations. The number of mouse clicks required, for example to copy a data set from one program to another, is drastically reduced.

Split View: View in the lower window is no longer automatically updated

In a split view, the program can also be viewed without restrictions during execution. The current execution position is only automatically updated in the upper window area.

Display of the program mode directly next to the program ID

The program mode (Run, Edit, Record) is displayed in the tab next to the program ID. This makes it easier for you to see which of the open programs is being executed, edited or recorded. This display facilitates work and creates time-saving transparency.

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Highlights

- Edit program block: Fewer mouse clicks direct editing faster to the target
- Program display: Change the view to other programs while editing, recording or executing a program simplifies the overview and saves time
- View program in split view: You can keep track of what's being processed before or after while running a program

Improvements WM | Quartis R2018-2

Expression Editor: New Fields and Functions

New fields for output of system information

You want to output information about WM | Quartis and the active measurement database in a measurement report.

The new fields Database name, Database path, Name and Version are available in the application group.

The Date/Time field returns the current time of the computer. This timestamp can be converted to a formatted date/time specification with the also new function DateToString().

Expr	Expression Editor									
Fi	elds Data Functions									
	• System									
	 Application 									
	··· Database name									
	··· Database path									
	Name									
	Version									
	Date									
	Date/Time									
	▷ · Measurement									

New functions: DateToString and EXTRACT

The conversion function DateToString converts a timestamp into a formatted date/time text. This function enables various formats, such as those known from Microsoft Excel, for example.

E	xpression Editor	
	Fields Data Functions	DateToString({System.DateTime}, 'yyyy-mm-dd_hh-nn-ss')
	Conversion functions	1:55
	CHR ^	Result
	DateToString	2018-03-13_20-03-14
	DBLE	

The string function EXTRACT can be used to extract specific values from a list with separators. In combination with the IncludeText function, values can also be read from a CSV file.

E	Expression Editor		
	Fields Data Functions	EXTRACT('WM,135,abc,Quartis,456,Wenzel', ',', 3)	
	String functions		1:49
	CONCAT	Result	
	EXTRACT	Quartis	
	INDX		

Metadata of Fields

In addition to the value of a field, you can now also output the name and the description. This is particularly useful for fields that are output in the measurement report.

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Material Batch number

Highlights

- WM | Quartis version and active measurement database output in measurement report
- Format date/time information as you like
- Access field metadata and output it in measurement report or into files



More improvements – simplify daily work

Calculate elements using expressions

For solving measuring tasks, it is often beneficial if new elements can be calculated on the basis of existing elements. Elements can now be completely defined by expressions - with mathematical formulas.

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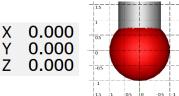
Name elements automatically and appropriately - ID generator with pattern

You measure components with identical elements at different positions, e.g. mould cavities, pins, drilling patterns, etc. For this purpose, it is helpful and useful to assign the names (IDs) of the elements according to the component pattern. WM | Quartis R2018-2 will help you to do this appropriately.

The automatically proposed element IDs can now be generated according to a configurable pattern.

Display of the probe sphere in 3D graphics

You measure very small components with inner contours that are difficult to see. In this case, you must be able to rely on the exact graphical display of the probe position, especially with thin styli.



The measuring sphere is now displayed exactly at the actual position regardless of the set probe configuration.

Simplified switching between click tool and "Rotate, pan, zoom view" tool

The graphics tool "Rotate, pan and zoom view" is often used when working with the CAD model. This graphics tool can now be activated by simply pressing the space bar. This can save a lot of time.



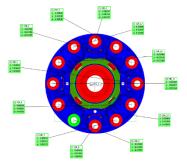
Note:

Working in graphics with a 3D mouse is even more efficient!

Reset element and feature labels to their original position

You have moved the element and feature labels in the graphic, then changed the view and now you want to reset all labels to their original positions?

Double-clicking an info label while holding down the Ctrl key resets all displayed info labels.

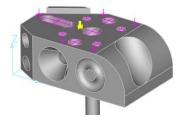


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Optimized preview when inserting auxiliary elements

You add many auxiliary elements to the CAD model of your parts. The auxiliary elements are now displayed in the "construction preview color" (default: yellow) during insertion and no longer in the "auxiliary element color" (default: magenta). This will give you a better visualization of the new inserted auxiliary element.

With the auxiliary element "Edge point", the edge direction and the reference direction can now be distinguished by lines of different lengths.



New and adapted CAD interfaces

WM | Quartis R2018-2 supports the following CAD interface formats:

- CATIA V4 (4.1.9 to 4.2.4)
- CATIA V5 (R8 to **R2018**)
- CATIA V6 (to **R2018**)
- DXF (2000/2002 and R12)
- IGES (to 5.3)
- Inventor (V11 to **2018**)
- Parasolid (9 to **30**)
- Creo, ProEngineer (16 to Creo4.0)
- Siemens NX (NX1 to **NX12**)
- Solid Edge (18 to **ST10**)
- SolidWorks (2003 to **2018**)
- STEP (AP203, AP214, AP242)
- VDA (1.0 and 2.0)



Additional machine models available

Further WENZEL measuring machine models and sizes can be configured for the representation in the 3D-graphic. The following measuring machine models have been added:



- WENZEL LH (3G) 65 (5000)
- WENZEL LH (3G) 87 +X-Y (1500)
- WENZEL LH (3G) 87 (6500)
- WENZEL RSplus 1821 X Y (3000)
- WENZEL RSplus 1821 X + Y (3000)
- WENZEL RSplus 1821 +X –Y (3000)
- WENZEL RSplus 1821 +X +Y (3000)

Select coordinate system of the CAD model during import

The coordinate systems contained in the CAD models often have very long identifiers. The complete name of the coordinate system is now displayed in a tooltip when you move the mouse over the entry in the list.

elect CAD coordinate system						
		ОК				
Coordinate system for model output						
Standard	•					
Standard P942290 SCHULUNGSWUERFEL	B 1 C MESSP	L 5P 0 Axis System	IslAxis Syste	m.1 (*AXS1	- wsp *MAST	ER
						-



Export feature and statistical data

Do you want to include your company logo in the template for exporting characteristics and statistical data? This is now possible; the templates can also contain images.

	A		с									
1	Statistics overview		WENZEL									
2			Metromec									
3												
4	Work Piec	e ID		2018								
5	Description	n		QT-826	QT-8261 Pctures in Template							
6												
7	ID	Description	Feature type	Prefix	ominal valu	LTol	UTol	Mean				
8	1				0.000	-0.100	0.100	12.133				
9	2				0.000	-0.100	0.100	24.257				
10	3				0.000	-0.100	0.100	12.123				

Program dialog for user guidance

The program dialog is often used to give instructions or hints to the user. To ensure that this information can also be read from a distance, a large font size is often used. The dialog is now automatically enlarged in height and width when executing the program and in the preview, so that the entire text can be read without scrolling.

Multiple machine network: deactivate / activate coupling

You work with multi-column measuring systems and use the coupling of the individual columns for a common machine coordinate system. An existing coupling can now be deactivated and then reactivated. This simplifies work, as a coupling, e.g. for calibrating the Renishaw PHS head, no longer needs to be deleted and re-created.

Renishaw PHS2 servo head supported

The new Renishaw PHS2 servo head contains precise optical reference marks in addition to the existing micro switch reference marks built into the former PHS1.

Using the Renishaw PHS2, therefore, once the controller has been switched on and the servo head has been initialized, it is no longer mandatory to carry out the complete, time-consuming calibration process.



Executing Renishaw PH10 programs with Renishaw REVO RSP2



You want to run existing programs written with a PH10 probe on a coordinate measuring machine with Renishaw REVO RSP2 sensor.

This is now possible. Program sentences which do not contain information about head orientation are carried out with the default settings. Such program sentences can also be edited to optimize the measuring sequences.



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Improvements_WM_Quartis_R2018-2_EN_20AH08 © WENZEL Metromec AG

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