



CMM-Check for PC-DMIS

Product presentation

2023-01-16 Customer Solutions Wetzlar

CMM monitoring based on ISO 10360

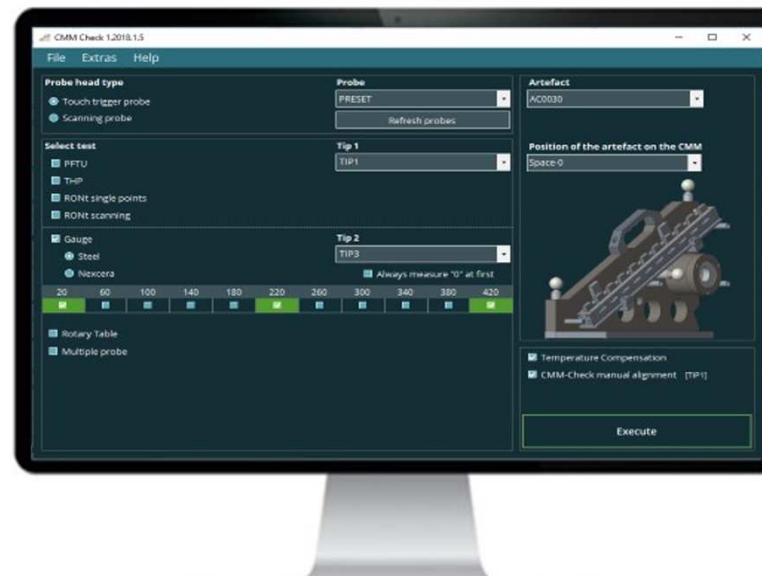


- In order to ensure traceable measurement results, a regular intermediate check of the accuracy of the coordinate measuring machine is necessary. For this reason, the "CMM Check" software for PC-DMIS (from version 2018 R1) was developed.
- This intuitively operated tool supports CMMs that are equipped with switching or analogue touch probes and optional articulated heads or rotary tables.
- With the "CMM Check" software, extensive statements can be made quickly, e.g. on volumetric length measurement deviations, probing deviations in scanning mode, multiple probe deviation, etc. Various plausibility checks prevent operating errors.
- The intermediate test of the coordinate measuring machine is carried out on a calibrated test body from eµmetron GmbH.
- Depending on the position of the test body and the number of measurements, the accuracy of individual, multiple or all axes can be verified.
- The evaluation of the tests takes place with reference to valid standards by means of the software "CMM Monitoring" from the company eµmetron GmbH in the measurement protocol (PDF format).
- The "CMM Check" software is available for download at: https://ftp.hexmet.de/PC-DMIS/PC-DMIS_CMM-CHECK/. Use requires a valid license.

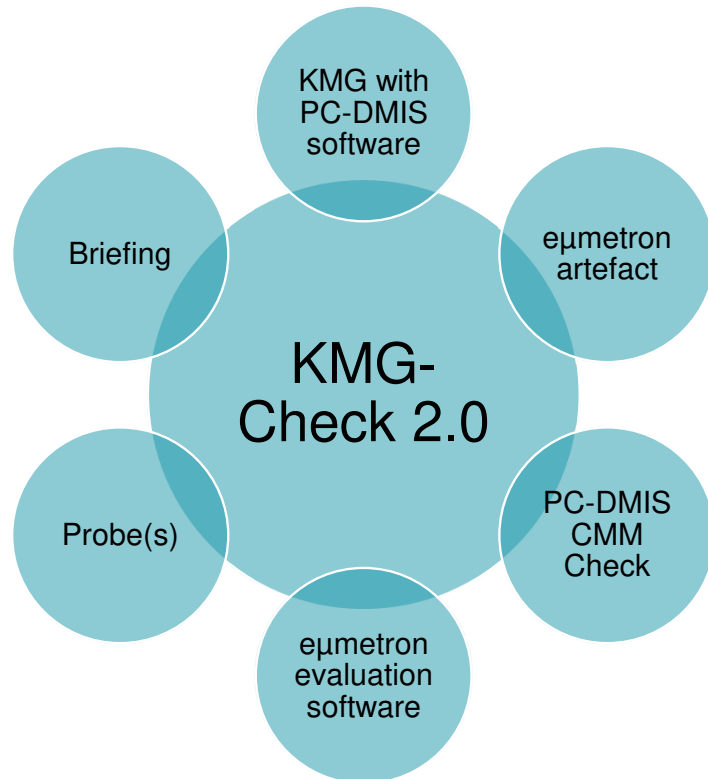
Aim and use of the software



- The software CMM-Check for PC-DMIS is used for the parameterized measurement of the CMM-Check® 2.0 and the transfer of the measurement results to the evaluation software of the company eumteron GmbH.
- The measurements are based on the Standard Series DIN EN ISO 10360 and are used exclusively for the monitoring of a coordinate measuring device.
- The program enables the complete measurement and measurement of individual normals of the artefact.

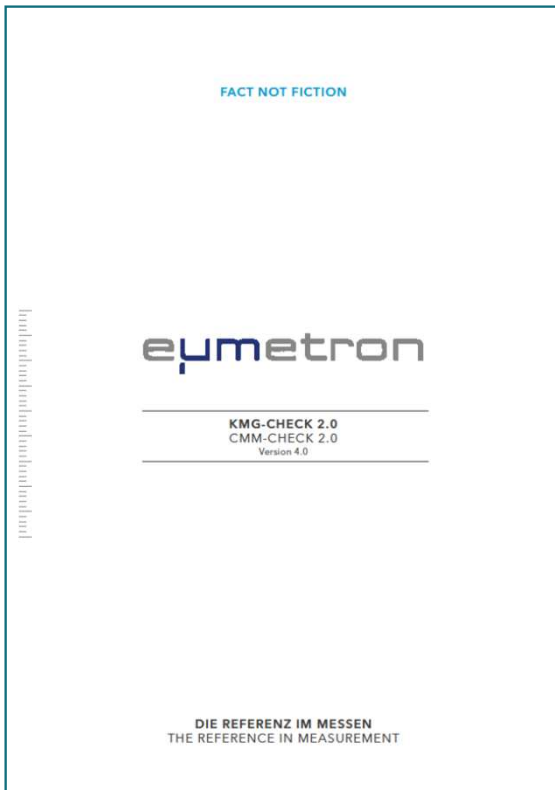


What is needed?

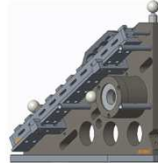


- The distribution of the complete package takes place via Hexagon. eµmetron GmbH is a supplier for the artefact and the evaluation software.
- Customers must be announced eµmetron, as they must be entered on the calibration certificate.
- eµmetron GmbH will contact the customer and offer him a software maintenance contract.
- The PC-DMIS CMM-Check module is maintained via PC-DMIS SMA.

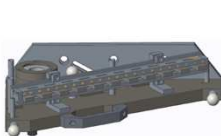
The artefact CMM-Check 2.0 from eumetron GmbH



Orientierung des Prüfkörpers im Raum 1
Orientation of the artefact in space 1



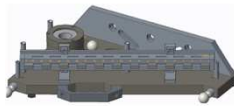
Orientierung des Prüfkörpers im Raum 2
Orientation of the artefact in space 2



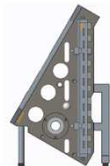
Orientierung des Prüfkörpers in der XY-Ebene
Orientation of the artefact in XY plane



Orientierung des Prüfkörpers in der XZ-Ebene
Orientation of the artefact in XZ plane



Orientierung des Prüfkörpers in liegender Stellung (X- oder Y-Achse)
Orientation of the artefact in horizontal position (X- or Y-axis)



Orientierung des Prüfkörpers in stehender Stellung (Z-Achse)
Orientation of the artefact in upright position (Z-axis)



<https://www.eumetron.de/pruefkoerper-und-normale#CMMAcceptance-Check>

Support machine hardware and probes

- In principle, all stationary CNC coordinate measuring devices (size $\geq 500 \times 500 \times 500 \text{mm}$) are supported, which are operated with PC-DMIS.
- Mobile measuring arms are not currently supported.
- Rotary table option is supported



Support machine hardware and probes

Depending on the respective touch system, precisely defined tips and extensions must be used. This is necessary to guarantee a collision-free measurement sequence.



LSP-S2 LSP-S2 Scan+ LSP-S4 HP-S-X3 HP-S-X5 HP-S-X5HD		
Order code	Connection	Description
M00-114-100-000	HP-S-X3	Stylus clamping
M00-813-125-000	HP-S-X5	Stylus clamping with cube
	HP-S-X5HD	
	LSP-S2	
	LSP-S2 Scan+	
060-694.056-000	M5	Styli Ø 8x90
M00-114-101-000	HP-S-X3	Cube
M00-694-109-000	M5	Styli Ø 12x80

HP-S-X1C		
Order code	Connection	Description
M00-694-270-000	HP-S-X1C	Stylus clamping with cube
M00-694-222-000	M3	Styli Ø 8x50
M00-694-241-000	M3	Styli Ø 8x75

HP-S-X1H HP-S-X1S		
Order code	Connection	Description
M00-694-209-000	HP-S-X1H	Stylus clamping
M00-694-200-000	HP-S-X1S	Stylus clamping
M00-694-222-000	M3	Styli Ø 8x50

Touch trigger probes (HP-TM HP-T HP-THD)		
Order code	Connection	Description
03939302	HP-TMe-SF	HP-TMe-SF Stylus clamping
03939614	HP-THDe-MF	HP-THDe-MF Stylus clamping
03969276	M2	R/CF Styli Ø 6x50

The evaluation software of eumetron GmbH

- The eumetron evaluation software is bound to the hardware of the CMM-Check, i.e. a software license must also be purchased per artefact.
- A software license can be used on any number of CMMs, the machine park expands, no additional license purchase is necessary.
Condition: The dongle with the license must be connected to the respective CMM.
- eumetron offers customers a software support contract. 1st Level Support is provided by eumetron.
- The software consists of a basic license and the evaluation software for the CMM check. The basic license can also be used for other solutions from eumetron.
- Q-DAS output is optional.
- The rotary table option is automatically included when ordering the rotary table option in conjunction with the artefact.

CMM-Check for PC-DMIS and recommended training

- CMM-Check is linked as an option to the respective PC-DMIS license.
- This means that it is a stand-alone license per CMM.
- It is recommended to be instructed by the Hexagon application technique of one day.
- 1st Level Support is provided by PC-DMIS Hotline.



Have we piqued your interest?

Simply download the software from our server and apply for a non-binding demo license.

https://ftp.hexmet.de/PC-DMIS/PC-DMIS_CMM-CHECK/