

1. Goal and purpose

The description of the service offered includes a list of the CMMs used as part of the accreditation. Information about the manufacturer, type, measurement software used, measuring volume, limits for the specified performance characteristics (limits in accordance with the applicable VDI/VDE or ISO standards) and examples of the lowest possible uncertainties of measurement are to be documented.

2. Place of fulfilment

The service is provided solely in facilities on the Nürtingen site in Germany.

3. Description of the accredited activity

Implementation and documentation, as well as, if necessary, evaluation against specifications of dimensional inspections, 3D nominal-actual comparison against CAD data and defect analyses on prototypes, initial samples, pre-series and series parts using industrial computed tomography (ICT).

4. Description of the service offered

CMS	Measuring range	Specification	Examples of extended uncertainty of measurement	Remarks
ZEISS Metrotom 800 G2	X-Y plane: Ø 170 mm Z height: 270 mm	E(TS), MPE = 9 µm + L/100 in acc. with VDI/VDE 2617 Blatt 13:2011 PF(TS), MPE = 4 µm in acc. with VDI/VDE 2617 Blatt 13:2011 PS(TS), MPE = 4 µm in acc. with VDI/VDE 2617 Blatt 13:2011	L = 100 mm U = 6.7 µm Ø = 50 mm U = 3.8 µm Material: PEEK	L = length measured in mm Admissibility of multi- material components U = expanded uncertainty of measurement with $k = 2$ (corresponds to 95% probability within the range of values)

Note: The masculine terms used in this document are not gender-specific. These terms are used for reasons of readability and simplicity; they do not imply exclusion or judgement.

5. Terms / definitions / abbreviations

ICT	= Industrial computed tomography
CMM	= Coordinate measuring machine(s)
AA	= Arbeitsanweisung (work instruction)
FB	= Formblatt (form)
VDI/VDE	= Verein Deutscher Ingenieure/Verband der Elektrotechnik Elektronik Informationstechnik e. V. (German Association for Electrical, Electronic & Information Technologies)
ISO	= International Organization for Standardization
E(TS),MPE	= Length measuring error
PF(TS),MPE	= Form probing error
PS(TS), MPE	= Size probing error

6. Applicable documents

AA-1030-002 Durchführung von Prüfungen mit CT im DAkKS-akkreditierten Bereich
(Undertaking inspections using CT in the DAkKS-accredited area)

AA-1030-004 Durchführung von Porositätsanalysen mit CT im DAkKS-akkreditierten Bereich
(Undertaking porosity analyses using CT in the DAkKS-accredited area)

7. Changes

Changes to the previous version are highlighted in yellow.

Date	Index	Change(s)
03.02.2025	001	New document