

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-K-18674-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 06.04.2021

Date of issue 06.04.2021

Holder of certificate:

Höntzsch GmbH & Co. KG
Gottlieb-Daimler-Straße 37, 71334 Waiblingen

Calibration in the fields:

Fluid quantities

- Velocity of gases
- Gas flow rate
- Volume of flowing gases
- Mass of flowing gases

The management system requirements in DIN EN ISO/IEC 17025 are written in language relevant to operations of calibration laboratories and operate generally in accordance with the principles of DIN EN ISO 9001.

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.
<https://www.dakks.de/en/content/accredited-bodies-dakks>*

Abbreviations used: see last page

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This document is a translation. The definitive version is the original German annex to the accreditation certificate.

Annex to the accreditation certificate D-K-18674-01-00

Permanent Laboratory

Calibration and Measurement Capabilities (CMC)

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement ¹⁾	Remarks
Fluid quantities Velocity of gases	0.1 m/s to 70 m/s	Wind tunnel Nozzle: 320 mm	0.5 %, but not less than 0.01 m/s	Reference standard: laser-Doppler-anemometer
Volume and volume rate of flowing gases	22 l/h to < 400 l/h	supercritical nozzle gallery	0.39 %	Measuring range: Air within standard conditions of 20 °C and 1013.25 mbar Calibration medium: atmospheric air
	≥ 0.4 m ³ /h to 57.9 m ³ /h	PTB Testing Instruction Volume 25:1998	0.36 %	
	5 m ³ /h to 250 m ³ /h	Rotary piston gas meter PTB Testing Instruction Volume 29:2003	0.30 %	
	200 m ³ /h to < 400 m ³ /h	Turbine gas meter PTB Testing Instruction Volume 29:2003	0.30 %	
	≥ 400 m ³ /h to 5'500 m ³ /h	PTB Testing Instruction Volume 29:2003	0.25 %	
Mass and mass rate of flowing gases	26 g/h to < 480 g/h	supercritical nozzle gallery	0.39 %	Calibration medium: atmospheric air
	≥ 0.48 kg/h to 69.5 kg/h	PTB Testing Instruction Volume 25:1998	0.36 %	
	6.0 kg/h to 300 kg/h	Rotary piston gas meter PTB Testing Instruction Volume 29:2003	0.30 %	
	250 kg/h to < 500 kg/h	Turbine gas meter PTB Testing Instruction Volume 29:2003	0.30 %	
	≥ 500 kg/h to 6'600 kg/h	PTB Testing Instruction Volume 29:2003	0.25 %	

Abbreviations used:

CMC Calibration and measurement capabilities
PTB Physikalisch-Technische Bundesanstalt

¹⁾ The expanded uncertainties according to EA-4/02 M:2013 are part of CMC and are the best measurement uncertainties within accreditation. They have a coverage probability of approximately 95 % and have a coverage factor of $k = 2$ unless stated otherwise. Uncertainties without unit are relative uncertainties referring to the measurement value unless stated otherwise.