

## Deutsche Akkreditierungsstelle

### Annex to the Accreditation Certificate D-K-21259-01-00 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 28.03.2023

**Date of issue:** 28.03.2023

Holder of accreditation certificate:

**DrehmomentService Dr. Peschel GmbH & Co. KG**  
**Hainwaldweg 2, 31228 Peine**

The calibration laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The calibration laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

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

Calibration in the fields:

#### **Mechanical quantities**

- **Torque** <sup>a)</sup>

<sup>a)</sup> also on-site calibration

*This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.*

**Annex to the Accreditation Certificate D-K-21259-01-00**
**Permanent Laboratory**
**Calibration and Measurement Capabilities (CMC)**

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement	Remarks
<b>Torque</b> Torque transducer, torque measurement chains*	1 mN·m to < 10 mN·m	DIN 51309:2022 DKD-R 10-5:2020 EURAMET cg-14 version 2.0	$2 \cdot 10^{-3}$	
	10 mN·m to < 100 mN·m		$1 \cdot 10^{-3}$	
	0.1 N·m to < 1 N·m		$4 \cdot 10^{-4}$	
	1 N·m to 20 kN·m		$2 \cdot 10^{-4}$	
Torque transfer wrenches*	0.1 N·m to < 1 N·m	DKD-R 3-7:2018	$4 \cdot 10^{-4}$	
	1 N·m to 3 kN·m		$2 \cdot 10^{-4}$	
Hydraulic wrenches	100 N·m to 8 kN·m	DmS-VA06:2022	$5 \cdot 10^{-3}$	only upward series with variation of piston position
	> 8 kN·m to 150 kN·m		$1 \cdot 10^{-2}$	
Torque reproducer	100 N·m to 150 kN·m	DmS-VA05:2022	$5 \cdot 10^{-3}$	only upward series , continuous measurement
		DmS-VA07:2022		only upward series with customer owned tools
Calibration devices for torque assembly tools*	1 mN·m to < 10 mN·m	DIN 51309:2022	$4 \cdot 10^{-3}$	
	10 mN·m to 20 N·m		$2 \cdot 10^{-3}$	
Calibration devices for torque wrenches*	0.1 N·m to 3 kN·m	DKD-R 10-8:2020	$4 \cdot 10^{-4}$	

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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-21259-01-00**
**On-Site Calibration**
**Calibration and Measurement Capabilities (CMC)**

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement	Remarks	
<b>Torque</b> Calibration devices for torque assembly tools*	1 mN·m to < 0.1 N·m	DIN 51309:2022	$4 \cdot 10^{-3}$		
	0.1 N·m to 20 N·m		$2 \cdot 10^{-3}$		
Calibration devices for torque wrenches*	0.1 N·m to 3 kN·m	DKD-R 10-8:2020	$8 \cdot 10^{-4}$		
Calibration devices for torque transducer, torque measurement chains*	1 mN·m to < 10 mN·m	DIN 51309:2022	$4 \cdot 10^{-3}$		
	10 mN·m to < 0.1 N·m		$2 \cdot 10^{-3}$		
	0.1 N·m to < 1 N·m		$8 \cdot 10^{-4}$		
	1 N·m to 20 kN·m		$4 \cdot 10^{-4}$		
	> 20 kN·m to 150 kN·m		$1.5 \cdot 10^{-3}$		
Torque transducer, torque measurement chains*	1 mN·m to < 10 mN·m	DIN 51309:2022 DKD-R 10-5:2020 EURAMET cg-14, version 2.0	$4 \cdot 10^{-3}$		
	10 mN·m to < 0.1 N·m		$2 \cdot 10^{-3}$		
	0.1 N·m to < 1 N·m		$8 \cdot 10^{-4}$		
	1 N·m to 20 kN·m		$4 \cdot 10^{-4}$		by using loading systems of customer
	> 20 kN·m to 150 kN·m		$1.5 \cdot 10^{-3}$		
Calibration devices for hydraulic wrenches	> 100 N·m to 150 kN·m	DmS-VA08:2022	$1.5 \cdot 10^{-2}$	by using hydraulic wrenches of customer in defined piston position	

**Abbreviations used:**

DIN	German institute for standardization
DKD-R	Guideline of Deutscher Kalibrierdienst (DKD), published by Physikalisch Technische Bundesanstalt
EURAMET	European Association of National Metrology Institutes
DmS	In house method of DrehmomentService Dr. Peschel GmbH & Co. KG

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