

DKD Calibration for Angle of Rotation DKD-K-09301

SCHATZ[®]
ADVANCED QUALITY



- **Angle of rotation calibration service from 0.1° to 7200°**
- **Calibration of torque/angle transducers and tools**
- **Internationally acknowledged DKD calibration certificate**
- **Accredited measurement uncertainty 0.05° (resolution 0.01°)**
- **Complete on-site factory calibration service (measurement uncertainty 1°)**

Application

Traceability of measuring equipment used in processes is an important quality element for ensuring that all measured values correspond to the actual physical units. For measured units falling within the scope of the German *Eichgesetz* (standardization and calibration act), this is administered by the *Eichamt* (office of weights and measures). For scientific and technical units, such as force and torque, this is handled by the *Deutscher Kalibrierdienst* (DKD) ('German National Calibration Agency').

This internationally recognized calibration certificate is becoming increasingly important, since it provides the only means to demonstrate traceability to national or international standards.

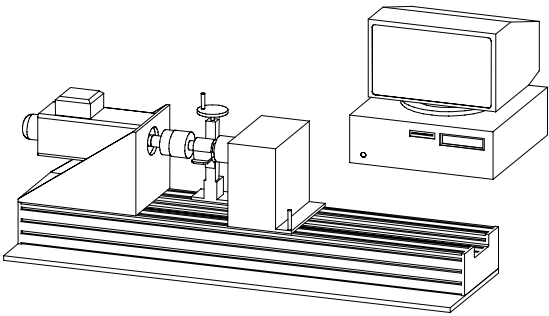
Description

The reference standard instrument (Dw-BNME #SCH-05) employs a servo motor drive for quasi-static and dynamic operation. The item under test is driven directly and connected to a reference angle transducer using a zero-backlash coupling. The resolution is 40".

Mechanical parasitic influences are suppressed by a torsionally stiff, flexible elastic disc coupling.

DKD Calibration for Angle of Rotation DKD-K-09301

Item	Measured quantity or item to be calibrated	Measurement range	Measurement conditions	Smallest possible absolute measurement uncertainty	Comments
	Angle of rotation		In accordance with the following procedure directives and/or device standards		
1	DKD calibration of rotation angle transducers fitted to torque transducers and tools	0.1° to 7200° resolution: 0.01°	Work Instruction AA-T-510	0.05°	Rotational speed 30 min ⁻¹ up to 1500 min ⁻¹
2	On-site plant calibration of rotation angle transducers fitted to torque transducers and tools	1° to 360° resolution: 0.1°	Work Instruction AA-T-520	1°	Quasi-static

	<p>Traceability of measurements to the national standard of the <i>Physikalisch Technische Bundesanstalt</i> (PTB) must be ensured.</p> <p>Measurement devices at the same classification level cannot be calibrated against each other.</p> <p>Service measurement equipment is calibrated using plant standards. Plant standards must in turn be calibrated using DKD standards or DKD transfer standards in order to ensure traceability.</p> <p>SCHATZ has the calibration equipment, certifications and technical competence necessary for performing DKD calibrations in house in their own facilities and on site in customer facilities.</p>
---	--