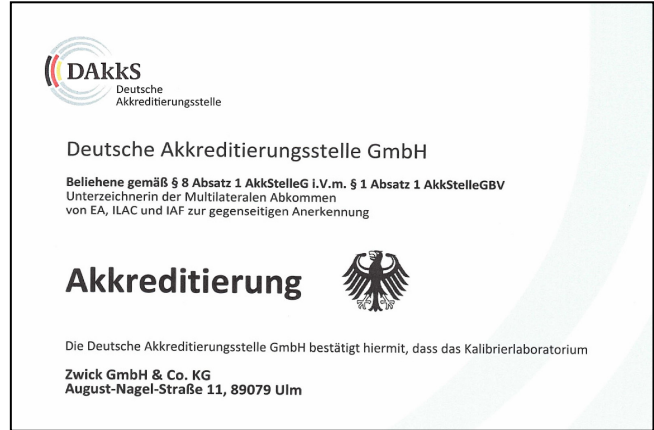
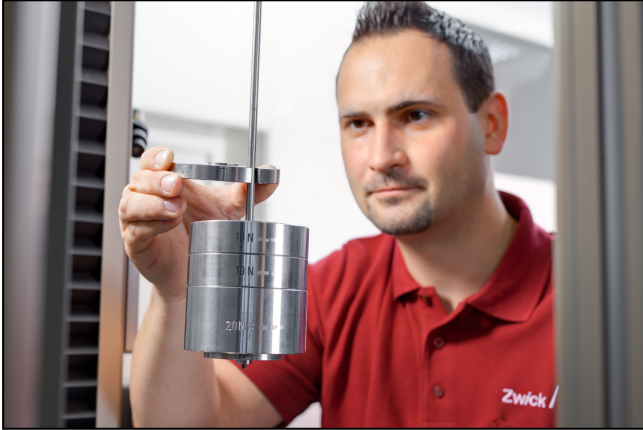


Product Information

Calibrations by Zwick – competent and comprehensive



Zwick Calibration Laboratory

- Benefit from our many years of experience in calibrating testing systems at Germany's biggest calibration laboratory for materials testing machines.
- Our calibration service and laboratory have been DKD-accredited since 1994 and DAkkS-accredited since 2013.
- This confirms that we satisfy the competence requirements for testing and calibration laboratories as contained in EN ISO/IEC 17025 - your guarantee of precise, independent and efficient calibration services.
- Working with standardized processes, we calibrate more than 10,000 materials testing machines and instruments a year, providing us with a deep fund of specialist knowledge and experience.

Everything under one roof!

Our comprehensive calibration portfolio

- We are familiar with many calibration methods, covering numerous standards.
- Our wide-ranging materials testing machine calibration portfolio enables us to calibrate a wide variety of measured quantities.
- These include accredited measured quantities force, length, mechanical work and hardness, plus many others, ensuring we have the right solution at hand for your machines and requirements.
- Static or dynamic testing machines, pendulum impact testers, hardness testers or other testing machines - we can provide professional, traceable calibration for all.
- As well as our own Zwick materials testing machines, we can also calibrate other makes of testing machine.

The advantages of a service contract

- Free warranty extension for Zwick materials testing machines.
- Free telephone assistance from our Support Desk.
- Monitoring of calibration intervals to comply with standards.

What sets us apart

- wide-ranging calibration portfolio
- extensive experience and expertise gained from over 10,000 calibrations a year
- low measurement uncertainty, giving high test-result accuracy
- large number of measuring points enables us to cover the entire force and measurement ranges
- inspection of your materials testing machine as part of calibration
- adjustment free of charge where required
- fast, flexible service provided by our many expert service technicians
- calibration of other makes of testing machine
- independence, efficiency and precision
- internationally recognized calibration certificates

Product Information

Calibrations by Zwick – competent and comprehensive

For your safety we calibrate more accurately than the standard requires.

The range for calibration depends on the type of load cell on the machine, the machine electronics and the display resolution.

For Zwick materials testing machines with HP (= high precision) series load cells, the usual range is from 0.2% of nominal force; for other types the range is from 0.4%. In this way we cover the full measurement range and ensure maximum result accuracy.

The standards require a calibration range of 20-100% of nominal force, with 5 calibration stages. A Zwick calibration certificate contains 11 calibration stages.



Our L_e measuring device was developed in-house. With a measurement uncertainty of 0.03 mm it satisfies the exacting requirements of EN ISO 9513

The safe option - our free warranty extension.

When you take out a Zwick service contract including annual inspection and calibration we will extend your warranty for new standard testing machines and instruments to up to 60 months. On top of that we will keep an eye on your calibration intervals as stipulated in the standards - a convenient, flexible arrangement.

Free Support Desk and support for software queries.

As well as the free warranty extension, when you take out a service contract we also provide free support for software matters, with expert assistance from our trained specialists in specific questions concerning your testXpert software. This guarantees efficient, optimized operation of your materials testing machines and instruments.

Added value for your productivity.

As part of our calibrations we offer inspections carried out using checklists. This reduces the risk of faults or machine stoppages and increases productivity, with long-term reductions in the cost of repairs and spare parts. During these inspections, which only we as manufacturers can perform, our service technicians examine your testing machines and are able to carry out minor repairs and adjustments.

Our flexibility - your success.

Our 85 highly skilled service and calibration technicians undergo continuous retraining. Having this number of technicians gives us access to a large pool of knowledge and expertise, while our extensive coverage in Germany, Austria, Switzerland, Denmark and the Benelux countries enables us to guarantee a fast, flexible and prompt on-site calibration service.

Our unique flexibility and proximity to our customers are especially important to us.

Do you have a materials testing machine made by another manufacturer?

No problem! As well as calibrating Zwick materials testing machines, we offer a calibration service for other makes of machine. We have many different tools and fixtures available, together with the necessary equipment to enable us to calibrate a wide range of materials testing systems.

Simply get in touch with us; we will check the specifications of the testing machines with you and will be happy to send you an obligation-free quotation.

Wherever you are, we can help.

Whether in Germany or overseas, our calibration laboratories are operated to the highest standards. As well as our calibration laboratory at our Ulm headquarters, we operate calibration laboratories around the world, in our branches in Europe, Asia and North and South America. In addition to DAKKS accreditation, we are also accredited by COFRAC, UKAS, A2LA, INMETRO and TÜRKAK.

Mutual recognition of national accreditation sites under the ILAC agreement allows us to guarantee worldwide acceptance of your calibration certificates and test results.

Product Information

Calibrations by Zwick – competent and comprehensive

Our DAkkS-accredited calibration portfolio

Accredited measured quantities		
Force		
Calibration of force-measurement devices of materials testing machines as per DIN 51220	in tensile direction: from 0.02 N to 3,000 kN	DIN EN ISO 7500-1 DIN EN ISO 7500-1 Bbl. 1-3
	in compression direction: from 0.02 N to 5,000 kN	DIN EN ISO 7500-2 ASTM E 4
Length		
Calibration of length-measurement devices of materials testing machines as per DIN 51220	in tensile and compression directions: from 0 mm to 1,500 mm	DIN EN ISO 9513 ASTM E 83 ASTM E 2309
Mechanical work		
Calibration of pendulum impact testers and impact devices	from 0.2 J to 750 J	DIN 51222 DIN 51230 DIN 52189 DIN 53512 DIN EN ISO 148-2 DIN EN ISO 13802 ASTM E 23
Hardness		
Calibration of hardness testing machines as per Brinell, Vickers, Rockwell, Knoop and ball indentation methods		DIN EN ISO 6506-2 DIN EN ISO 6507-2 DIN EN ISO 6508-2
Calibration of loading devices of hardness testing machines	from 10 g to 3,000 kg	DIN EN ISO 4545-2 DIN EN ISO 2039-1 ASTM F 36
Calibration of the optical indentation-measurement device of hardness testing machines	from 0 mm to 6 mm	DIN EN ISO 6506-2 DIN EN ISO 6507-2 DIN EN ISO 4545-2
Calibration of the depth-measurement device of hardness testing machines	from 0 mm to 0.8 mm	DIN EN ISO 6508-2 DIN EN ISO 2039-1 ASTM F 36

Product Information

Calibrations by Zwick – competent and comprehensive

Additional measured quantities in our calibration portfolio

As well as our DAkkS-accredited calibration portfolio we also calibrate other measured quantities, which we can issue with a factory calibration certificate or ISO documentation as required.

Additional measured quantities		
Dynamic force		
Verification of dynamic force on Vibrophores		MIL STD - 1312 B
Torque		
Calibration of torque	from 0.02 Nm to 2,000 Nm	Based on DIN EN ISO 7500-1
Angle		
Calibration of the rotary encoder on torsion testing machines	from 0° to 360°	Based on DIN EN ISO 9513
Alignment		
Electronic measurement of the test axis alignment on materials testing machines using strain-gaged alignment specimens		ASTM E 1012 Nadcap AC 7101 Nadcap AC 7122
Instrumented striking edges		
Calibration of the force of instrumented striking edges of pendulum impact testers		DIN EN ISO 14556
Puncture and impact strength		
Calibration of drop-weight testers: mass of drop weight, drop height and piezo load cell		DIN EN ISO 6603-1 DIN EN ISO 7765-1
Hardness, special methods		
Calibration of hardness testing machines for instrumented indentation test (Martens), Vickers depth measurement method, Brinell depth measurement		DIN EN ISO 14577-2 VDI/ VDE 2616
Melt index MFR/ volume flow index MVR		
Calibration of extrusion plastometers for melt index and volume flow index	Load, piston stroke and temperature	DIN EN ISO 1133
Vicat/ HDT		
Calibration of Vicat/HDT heat deflection temperature with oil bath or direct contact	Load, depth travel and temperature	DIN EN ISO 306 DIN EN ISO 75-1
Temperature conditioning device		
Calibration of temperature in center of test-chamber of temperature chambers	from -40°C to 350°C	Based on guideline DAkkS-DKD-R 5-7 Meth. C
High temperature		
Calibration of thermo-elements of high-temperature furnaces	up to 1,200° C	Based on guideline DAkkS-DKD-R 5-3