Calibration & service centre
Accredited and high-quality calibrations

Regular quality controls for measuring instruments are required by almost all quality assurance standards. There is, however, another convincing reason to always certify the accuracy of your measuring instruments - the sense of safety.

After all, only when you know that your instruments are working properly can you also trust the reliability of their measurements. This assurance is as important for your business as it is for your customers.

Correct measuring is of fundamental importance in our highly technological world, since inaccurate measurements can lead to expensive economic consequences.

Every measuring instrument is subject to ageing as a result of mechanical, chemical or thermal stress and thus delivers measured values that change over time. This cannot be prevented, but it can be detected in good time by calibration.

Regular calibration offers you

- Improvement of manufacturer quality
- Process safety
- Confidence in the measuring device
- Prevention of rejects and reworking
- Compliance with standards, guidelines and certifications
- Protection from possible replacement claims
- Audit safety
Experience and acceptance

Since 1982 WIKA has been a member of the German Calibration Service (Deutscher Kalibrierdienst - DKD), the calibration laboratory and the mobile calibration service have been accredited to DIN EN ISO/IEC 17025.

Since then we have been actively participating in the DKD working groups as well as standardisation committees – contributing our experience to technological progress.

To ensure the same level of all calibrations, the laboratories carrying them out must be accredited in accordance with internationally recognised rules (DIN EN ISO IEC 17025).

Whether DAkkS, SCS, NIST or Cofrac – the traceability of the measurands pressure, temperature, current, voltage and resistance to national and international standards is in safe hands with us.

With a systematic monitoring through DAkkS and regular calibration of our references, you are on the safe side with us.
WIKA – Your strong, global partner in calibration technology

WIKA is the ideal partner for solutions in calibration technology, whether a single service instrument is required, quickly and without complication at the point of use, or whether a fully automated calibration system needs to be designed for the laboratory as well as production. We are able to offer an appropriate solution for each application.

WIKA has successfully integrated renowned manufacturers of calibration instruments into the Group. Through the combination of experience and the product range, we can offer each customer the ideal solution for each measurement task.

WIKA offers a unique range of products in all accuracy classes, from primary standards to simple hand-held instruments, all with different levels of automation.

A multitude of specific patents ensure unmatched performance characteristics with many of our calibration instruments. Our customers particularly appreciate the well-proven functionality of our instruments, which results from WIKA being not only a manufacturer of calibration equipment, but that these are also used in their own production and within their accredited laboratories.

The DH-Budenberg brand stands, like no other, for decades of experience in the manufacture of pressure balances. DH-Budenberg develops and manufactures pressure balances for industrial and laboratory applications with small measurement uncertainties. The product portfolio contains both portable and stationary instruments.

For over 40 years, Mensor has been setting new standards through innovative products for the automation of pressure testing tasks. The pressure controllers are suitable for both sensitive applications for use in laboratories and for the demanding requirements in manufacturing.

WIKA stands for portable instruments for pressure and temperature, as well as current, voltage and resistance. Thanks to their robust design, they are ideally suited for calibration or testing tasks on site.
Test pumps serve as pressure generators for the testing of mechanical and electronic pressure measuring instruments through comparative measurements. These pressure tests can take place in the laboratory or workshop, or on site at the measuring point.

High-accuracy pressure sensors and very stable standard thermometers are ideal for applications as references in industrial laboratories. Due to their analogue or digital interfaces, they can be connected to existing evaluation instruments.

Our hand-held measuring instruments (process tools) offer a simple capability for measurement or simulation of all established measurands on site. They can be operated with a wide variety of pressure sensors or thermometers.

High-accuracy digital precision measuring instruments are ideal for applications as reference standards in industrial laboratories or metrology, enabling high-accuracy calibration. They feature exceptionally simple handling and an extensive range of functionality.

Due to their integrated controller, these instruments offer exceptional convenience. Typically, a fully automated setting of the required value can be set via the interface.

Fully automated calibration systems are customer-specific, turnkey installations which can be fitted in laboratories as well as in the production environment. With integrated reference instruments and calibration software, calibration certificates can be generated and archived in a simple and reproducible way.
Calibration service
Pressure

We calibrate your pressure measuring instruments (independent of manufacturer)

- From -1 bar ... +8,000 bar
- Using high-accuracy reference standards (pressure balances) and working standards (precise electronic pressure measuring instruments)
- With an accuracy of 0.003 % ... 0.01 % of reading
- In accordance with the directives DIN EN 837, DAkkS-DKD-R 6-1, EURAMET cg-3 or EURAMET cg-17

Calibrateable measuring devices

- All pressure measuring instruments for negative and positive overpressure, differential pressure incl. differential pressure under static pressure and absolute pressure
- Dial pressure gauges
- Electrical pressure measuring instruments such as transducers, transmitters and pressure sensors
- Analogue differential pressure gauges
- Pressure switches
- Liquid-column pressure gauges / U-tube pressure gauges
- Inclined-tube pressure gauges
- Pressure calibrators
- Dead-weight testers/Pressure balances
- Pressure controllers
- Vacuum gauges
- Absolute pressure sensors
- Differential pressure sensors
Calibration service
Temperature

We calibrate your temperature measuring instruments (independent of manufacturer)

- From -196 ... +1,200 °C
- In calibration baths and tube furnaces using appropriate reference thermometers or with various fixed-point cells (e.g. mercury, water, gallium, zinc, tin and aluminium)
- With an accuracy of 2 mK ... 1.5 K
- In accordance with the appropriate DKD/DAkkS and EURAMET directives

Calibrateable measuring devices

- Electrical thermometers with transmitter for temperature
- All resistance thermometers Pt25, Pt100, Pt1000, NTC etc.
- Thermocouples
- Electrical display instruments such as hand-holds, data loggers or table-top indication instruments etc.
- Various sensor types such as immersion probes, ambient sensors and surface contact sensors
- Reference thermometers
- Mechanical thermometers
- Dry-well calibrators
- Temperature calibrators
- Infrared calibrators
- Calibration baths
We calibrate your electrical measuring instruments (independent of manufacturer)

- DC current in the range from 0 … 100 mA
- DC voltage in the range from 0 … 100 V
- DC resistance in the range from 0 … 10 kΩ
- In accordance with the directives of VDI, VDE, DGQ, DKD 2622

Calibrateable measuring devices

- Multimeters
- Calibrators
- Voltage standards
- Power measuring instruments
- Resistances
- Micro to tera ohmmeters
- Recorders
- Resistance decades
- Shunts
- Multi-function calibrators
- Current sources
- Voltage sources
Calibration certificates

Necessity and execution of a calibration

Product quality, operational safety and cost effectiveness relate directly to an accurate and reliable registration of the process variables. Therefore, you should entrust the calibration and maintenance of your measuring instruments to a competent partner. Prior to calibration an evaluation of the calibration capability of the instruments is performed and, if necessary, an adjustment is made.

The calibration is carried out in accordance with the valid directives. The results of the calibration are documented in a calibration certificate and the calibration item receives a calibration mark. Depending on your requirements you can select either a traceable calibration or a factory calibration.

Comparison of factory and traceable calibrations

<table>
<thead>
<tr>
<th>Factory calibration</th>
<th>Traceable calibration (e.g. DKD/DAkkS)</th>
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</thead>
<tbody>
<tr>
<td>List of single measured values</td>
<td>List of single measured values</td>
</tr>
<tr>
<td>Specification of the applied reference standard</td>
<td>Specification of the applied reference standard</td>
</tr>
<tr>
<td>Traceability of the inspection equipment to the national standard is given, as a rule</td>
<td>Calculation of mathematical parameters</td>
</tr>
<tr>
<td>Documentation in an inspection certificate (no formal obligation)</td>
<td>Calculation of the expanded measurement uncertainty (as required in ISO 9001)</td>
</tr>
<tr>
<td>In accordance with country-specific requirements</td>
<td>Traceability to the national standard of the PTB is guaranteed</td>
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⇒ Inspection certificate per DIN EN 10 204

⇒ DKD/DAkkS calibration certificate

European co-operation for Accreditation ensures worldwide acceptance
Calibration seminars

Our seminars on the topic of calibration technology let you expand your know-how, further your practical knowledge and keep you abreast of the latest developments. In addition to learning about the theoretical basics, you will be carrying out calibrations yourself, both manually and fully automated, with the aid of tasks in the practical part.

Calibration “pressure”

You will learn how to perform calibration with the aid of dead-weight testers, pressure controllers and hand test pumps. You will then make your own calibrations, evaluate the results and document them.

Calibration “temperature”

You will learn the various calibration methods (i.e. the fixed point and comparison method). We will also show you how calibration is performed with the aid of water triple and ice points. You will calibrate a resistance thermometer in a liquid bath and a dry-well calibrator, evaluate the results and document them.

Seminar objectives

You will know

- how calibration is performed
- which instrument you need to choose for which calibration
- which typical sources of error can occur during measurement and how to avoid these

You will know

- the difference between calibration, verification and adjustment
- the standards and directives for a DAkkS-accredited laboratory
- calibration methods and standards
Service and consulting

Hotline for calibration and repair

Information on calibration in the WIKA laboratory or on-site calibrations is available from our CT service team.

Monday - Friday from 6.30 a.m. to 4 p.m.
Phone +49 9372 132-5049
ctserviceteam@wika.com

Enquiry form for calibrations

Do you need a non-binding offer for a calibration? Simply use the following form. We will be pleased to help you!

Seminars

Our seminars on the topic of calibration technology let you expand your know-how, further your practical knowledge and keep you abreast of the latest developments. In addition to learning about the theoretical basics, you will be carrying out calibrations yourself, both manually and fully automated, with the aid of tasks in the practical part.

- Calibration seminar, pressure
- Calibration seminar, temperature

Current dates can be found on our website.

Online services

Further information on our services and products offering can also be found on our website.

Training

In addition to our calibration seminars, you also have the option of receiving training customised to your needs. No matter if for one person or a group, on your premises or at WIKA - you design your training.

- Product training
- Calibration training
- Software training

Hotline for calibration instruments

We would be pleased to assist and advise you in the selection of suitable solutions for extending your equipment pool.

Phone +49 9372 132-5015
ctsales@wika.com