

Přístroje pro měření a metrologii

The background of the cover is a collage of various metrology equipment. At the top, a '6801 PRECISION MULTIMETER' is visible with its digital display showing '10.90035 V DC'. Below it is a '3015A PRECISION MULTIFUNCTION CALIBRATOR' with a display showing '900.000A'. In the foreground, there is a '1500 AMP AC/DC CLAMP COIL ADAPTER' with four coils labeled '2 TURN COIL', '50 TURN COIL', '1500A @ 30A INPUT', and '10 TURN COIL'. A digital multimeter is also visible on the left. The entire scene is overlaid with a semi-transparent blue filter and a yellow diagonal line running from the top left to the bottom right.

# CALIBRATION MEASUREMENT METROLOGY

[www.metrologie.cz](http://www.metrologie.cz)

# ACCREDITED CALIBRATION LABORATORY (AKL) No.2318

The **PRIMA BILAVCIK** calibration laboratory, accredited by the **Czech Institute for Accreditation, o.p.s.** according to the **CSN EN ISO/IEC 17025:2018** standard, is equipped with the most modern measuring equipment for calibration of measuring instruments **in the fields of length, angle, temperature, pressure, humidity, moment of force, mass, electrical quantities and force**. All gauges used in calibrations are listed in the primary standards of national laboratories.

Calibrations are carried out in our laboratories in **Uhersky Brod, Mlada Boleslav and NPP Mochovce in Slovakia**, or in a mobile calibration laboratory "**calibration ambulance**", which will come to your company.

We can also arrange **gauges pick-up** at your company and **bring them back** after the calibration. You will not have to worry about transport costs.

In the calibration laboratories we use **Palstat CAQ software for calibration and recording of measuring instruments**, which helps to automate a large part of calibration activities between us and the customer. This saves time and administrative costs, but also reduces errors.

## Length / Angle / Torque

### What devices do we calibrate?

- calipers, micrometric gauges, cavity gauges, internal and external smooth gauges, deflection gauges, end gauges
- protractors
- torque wrenches (including angle of rotation measurement)
- screwdrivers, tighteners
- special gauges
- Jigs
- machines and laboratory equipment

### How are we equipped?

- precision length gauges Mahr and Trimos
- Steinmeyer deflection gauge checker
- Werth and Coord coordinate measuring machines
- Stahlwille calibration equipment
- accurate standards for calibration of coordinate and other machines
- Renishaw laser interferometer

Length	Angle	Moment of force
0 to 20 m	0 to 360°	0,2 to 1000 Nm
In the laboratory and at the customer's site		



## Temperature / Pressure / Humidity

### What devices do we calibrate?

- digital and analogue thermometers of various types, thermoelectric cells
- pyrometers, temperature data loggers and other equipment
- hygrometers
- strain gauges, digital pressure gauges
- measuring chains for pressure measurement
- pressure sensors and transmitters

Thermometers	Hygrometers	Pressure gauges
-100 to 1 600°C	10 to 95%	0,01 to 2 000 Pa
In the laboratory and at the customer's site		

## Mass / Force

### What devices do we calibrate?

- laboratory, analytical, medical, bench, floor, counting, mobile, hanging scales
- weights (F1, F2, M1, M2, M3)
- analogue and digital force gauges

Scales	Weights	Force gauges
1 mg to 1000 kg	1 mg to 20kg	0 N to 2500 N
In the laboratory and at the customer's site		



## Electrical quantities

### What devices do we calibrate?

- digital and analogue multimeters, oscilloscopes, electrical calibrators, RLC meters, clamp meters, resistance decads, inspection instruments, mechanical and digital stopwatches

Voltage		Current		Power	
AC	DC	AC	DC	AC	DC
0 to 1000 V	0 to 1050 V	0 to 30 A	0 to 30 A	30 kW	30 kW
In the laboratory and at the customer's site					



# ACCREDITED TESTING LABORATORY No. 1731

The accredited testing laboratory complies with the requirements of CSN EN ISO/IEC 17025 17025:2018. We provide our customers with professional service in the form of custom measurement carried out by selected measuring technologies (CT / CMM / contour / roughness / 3D scanning), consultation of measuring tasks, the determination of measurement strategy or reverse engineering services.

## Computed tomography / NDT analysis / 3D scan

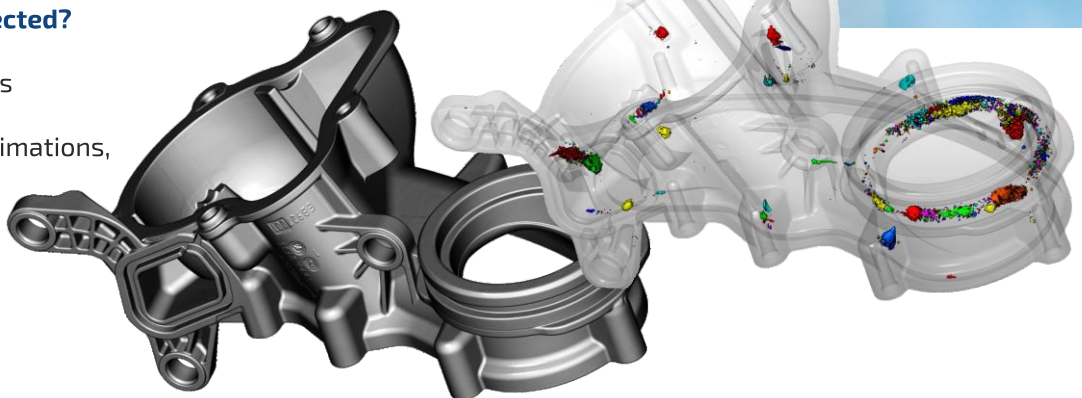
- porosity analysis, crack detection, seal inspection, wall thickness analysis
- the comparison of scan to CAD data
- complete dimensional inspection
- solution to urgent defects in the production programme
- cross-disciplinary use
- non-destructive method

### Company equipment

- Werth TomoScape HV500 computed tomograph

### What data can be collected?

- 2D X-ray images
- 3D volumetric graphics
- 3D scans
- 2D and 3D outputs, animations, videos

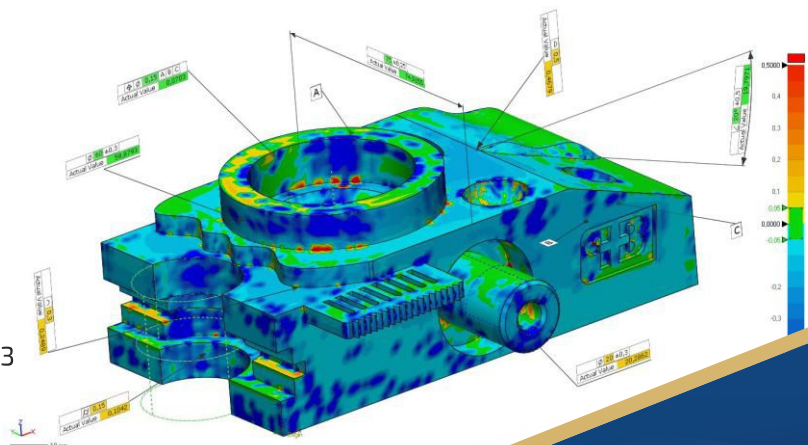


## Coordinate measurement

- optical and probe measurement
- parts up to 1200 mm
- modelling
- reverse engineering

### Company equipment

- 3D measuring machines Werth and Coord3
- IP camera with zoom optics
- scanning probe head
- 3D microprobe
- rotary axis
- wide range of other accessories for coordinate machines

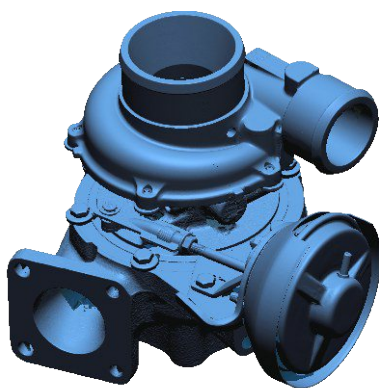


## Portable Probe Measurement and 3D Scanning

- optical and probe measurement
- the measurement of large parts
- machine alignment check
- surveying of buildings, production halls and other premises
- digitization of cultural heritage
- flexible solution for use directly at the customer's site

### What is our equipment?

- portable FARO ScanArm arm with a range of up to 4 m (can be extended)
- FARO Laser Tracker system with a range of up to 25 m
- wide range of accessories
- SW Polyworks



## Roughness, Contour and Roundness Measurements

- high-precision measurement of roundness and shape deviations
- parts inspection
- defect analysis
- control measurements

### How are we equipped?

- ACCRETECH Rondcom NEX
- ACCRETECH Surfcom NEX
- ACCRETECH Roughness machines



# WHAT ELSE CAN WE OFFER YOU?

Ask, all questions are welcome!

## Mobile laboratory and calibration at the customer's site

- we will come to your place and perform calibrations or measurements in all fields
- great saving of time and money
- you no longer need to transport your gauges
- no need to have spare gauges for the calibration period
- you can take advantage of the presence of our technicians for advice, calibration of larger instruments or training
- the fastest way to calibrate
- minimal impact on the production process

## Turnkey metrology

- services of an external metrologist
- gauges database management
- implementation of the metrology system in your company
- introduction of Palstat metrology software for gauges management
- audit preparation

## Consultancy

Don't know how to set up metrology in your company?

Do you need to know how to set a calibration period for your measuring instruments? Is your product defective?

Do you need to consult your measuring procedure?

Are you looking for a calibration company for your laboratory's standard equipment? Not sure how to understand a drawing or standard?

**Never mind, we are happy to advise you!**



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Testing laboratory  
Metrology and consulting  
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Ceska republika

- Instruments for measurement and metrology • Computed Tomography (CT) • Training Centre PRIMA AKADEMIE
- Accredited Calibration Laboratory • Authorized Metrology Centre • Accredited Testing Laboratory

[www.metrologie.cz](http://www.metrologie.cz)