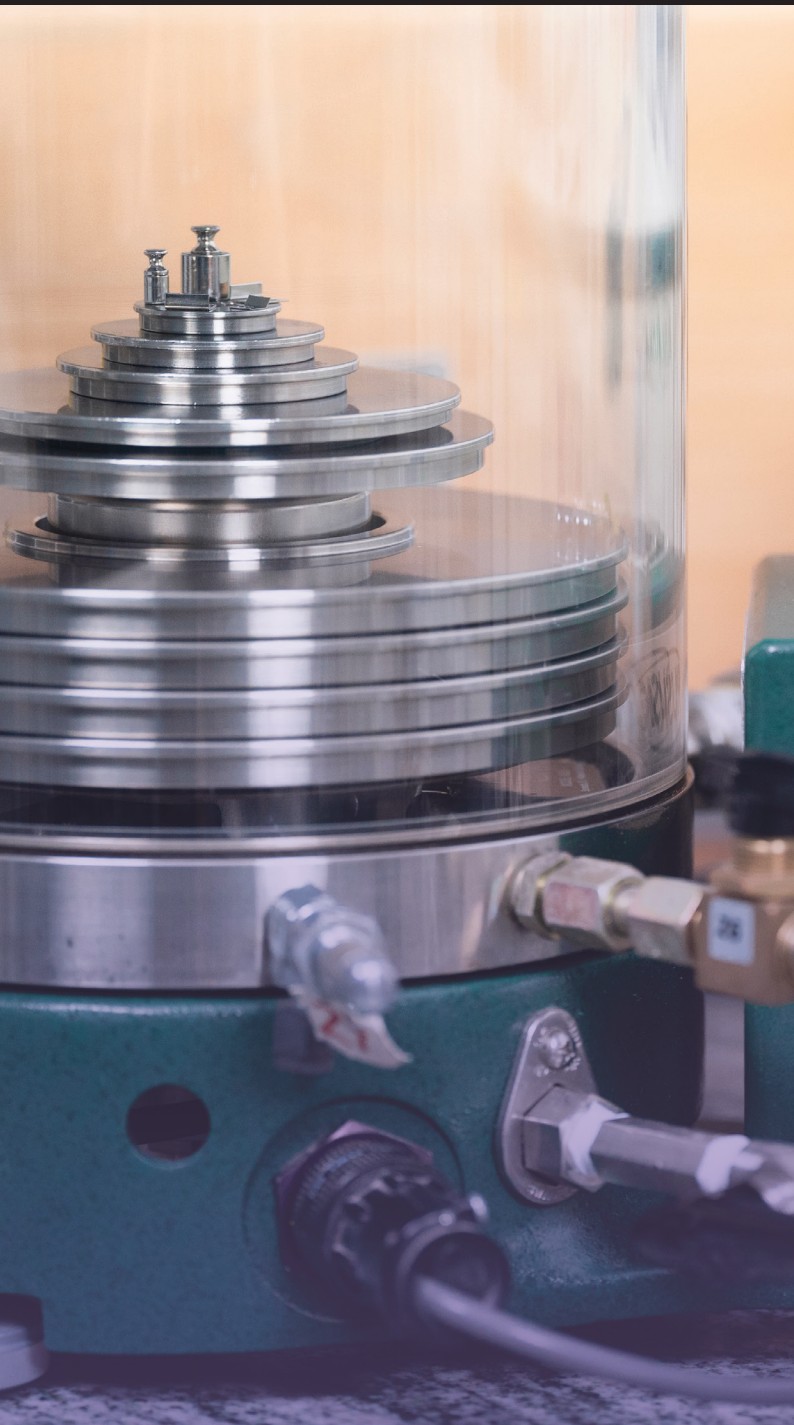


accredited calibration laboratory

calibration of the
measuring instruments



The laboratory meets requirements of the PN-EN ISO/IEC 17025:2018-02 standard and has been accredited by the Polish Centre for Accreditation since 2005, certificate no.: AP 074. Accreditation confirms the competence of the laboratory and makes the issued calibration certificates acceptable in Poland and abroad.

Knowledge and experience of laboratory personnel and high measurement capability CMC, achieved by laboratory standards with the highest accuracies, guarantee the high quality of services.

- high quality of services
- competitive prices for services
- short duration of the service
- professional customer service

calibration of the measuring instruments

The calibration laboratory located at Plum Sp. z o.o. is a stationary laboratory, providing services in the field of calibration of instruments measuring temperature, pressure, electrical quantities and relative air humidity.



accredited calibration laboratory provides calibration services:



electronic thermometers and temperature transmitters



RTD temperature sensors (the comparative calibration and the fixed point calibration)



instruments for measuring temperature and relative humidity: thermohygrometers, hygrometers



radiation pyrometers and photoelectric



simulators and temperature indicators



fixed resistors and decade boxes



pressure gauges electronic, spring and pressure transducers



insulation resistance testers and electrical safety testers



digital multimeters, multifunction calibrators: voltage (DC, AC), current (DC, AC), resistance (DC, AC), frequency and capacity



temperature		
type of the calibrated measuring instruments	measuring range*	CMC*
calibration in the calibration bath		
RTD temperature sensors	(-40 ÷ 230) °C	0.008 °C
temperature transmitters with temp. sensors		0.010 °C
electronic thermometers		0.010 °C
calibration in the fixed points cells		
standard platinum resistance thermometers (SPRT), electronic thermometers	-38.8344 °C in cell tpHg	0.0030 °C
	0.01 °C in cell tpH2O	0.0025 °C
	29.7646 °C in cell mpGa	0.0030 °C
	156.5985 °C in cell fpIn	0.0040 °C
	231.928 °C in cell fpSn	0.0050 °C
calibration in the temperature chamber		
electronic thermometers	(-30 ÷ 80) °C	0.1 °C
temperature transmitters with temp. sensors		
calibration of pyrometers		
radiation pyrometers	(-15 ÷ 500) °C	(0.8 ÷ 2.4) °C
photoelectric pyrometers		
relative air humidity		
type of the calibrated measuring instruments	measuring range*	CMC*
devices for measuring the environmental conditions		
thermohygrometers	humidity measurement: (10 ÷ 95) %rh in the temperature range: (10 ÷ 60) °C	(0.9 ÷ 1.2) %rh
temperature and relative humidity transmitters		
pressure		
type of the calibrated measuring instruments	measuring range*	CMC*
digital pressure gauges, pressure calibrators mechanical pressure gauges, pressure transmitters, barometers calibration possible in a temperature chamber, in the temperature range (-40 ÷ 180) °C	gauge pressure (nitrogen, pure air, water)	
	(-100 ÷ 7000) kPa	≥ 0.0036 %
	(7000 ÷ 10000) kPa	≥ 0.020 %
	(10000 ÷ 70000) kPa	≥ 0.026 %
	absolute pressure (nitrogen, pure air, water)	
	(1.4 ÷ 7000) kPa abs	≥ 0.0036 %
	(7000 ÷ 10000) kPa abs	≥ 0.020 %
(10000 ÷ 70000) kPa abs	≥ 0.026 %	
electrical quantities		
type of the calibrated measuring instruments	measuring range*	CMC*
digital multimeters, resistance meters, oscilloscopes, insulation resistance testers		
DC voltage	10 μV ÷ 1100 V	≥ 0.0002 %
DC current	0.01 μA ÷ 20 A	≥ 0.0015 %
DC resistance	0.001 Ω ÷ 20 GΩ	≥ 0.00025 %
AC resistance	10 mΩ ÷ 210 mΩ	≥ 1 mΩ
capacity	0.4 nF ÷ 100 μF	≥ 0.29 %
AC voltage (10 Hz ÷ 1 MHz)	1 mV ÷ 1100 V	≥ 0.007 %
AC current (10 Hz ÷ 10 kHz)	10 μA ÷ 20 A	≥ 0.020 %
frequency	1 Hz ÷ 100 MHz	≥ 0.0003 %
clamp meters		
DC current	(0 ÷ 1000) A	≥ 0.5 % + 0.2 A
AC current (50 Hz)	(0 ÷ 1000) A	≥ 0.25 % + 0.1 A
multifunction calibrators, insulation resistance testers, voltage sources, power supplies, fixed resistors, decade boxes, generators		
DC voltage	10 μV ÷ 4000 V	≥ 0.00015 %
DC current	0.01 μA ÷ 20 A	≥ 0.0015 %
DC resistance	0.001 Ω ÷ 1.999 GΩ	≥ 0.0003 %
AC voltage (10 Hz ÷ 500 kHz)	1 mV ÷ 5200 V	≥ 0.012 %
AC current (40 Hz ÷ 10 kHz)	10 μA ÷ 30 A	≥ 0.042 %
frequency	1 Hz ÷ 100 MHz	≥ 0.0003 %
temperature indicators (meters), temperature simulators		
temperature indicators and temperature simulators compatible with RTD temperature sensors (e.g. Pt100, Pt1000)	(-200 ÷ 200) °C	0.005 °C
	(200 ÷ 500) °C	0.010 °C
	(500 ÷ 850) °C	0.015 °C

*a detailed list of the measuring ranges together with the measurement capability values of the CMCs is given at: lab.plum.pl/en/calibration-lab/

calibration laboratory in plum, is a guarantee of high quality at a reasonable price

