

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

PTS Josef Solnař, s.r.o.
Calibration Laboratory
U Hrubků 170/18, Nová Ves, 709 00 Ostrava

CMC for the field of measured quantity: Testing of properties and defects of materials

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min. unit	max. unit					
1*	Ultrasonic defectoscopes Stability – measurement of amplitude Stability - measurement of position Transmitter - Impulse voltage amplitude Transmitter – Pulse decay amplitude Transmitter – Pulse rise time Transmitter – Pulse duration Receiver – f_{im} , lower limit frequency Receiver – f_{um} , upper limit frequency Receiver – f_0 , medium frequency Receiver – Δf , bandwidth Receiver – Equivalent input noise level Receiver – Attenuator accuracy Receiver – Vertical linearity Time base linearity for digital instruments	0 % SH 0 % SW 1 V 1 V 0 ns 0 ns 0.1 MHz 0.1 MHz 0.1 MHz 0.1 MHz 10^{-12} V/ $\sqrt{\text{Hz}}$ 0 dB 0 dB 0.5 μs	to 100 % SH to 100 % SW to 400 V to 400 V to 500 ns to 500 ns to 25 MHz to 25 MHz to 25 MHz to 25 MHz to 10^{-6} V/ $\sqrt{\text{Hz}}$ to 70 dB to 70 dB to 2,000 μs		1.4 % SH 1.1 % SW 3.2 % 3.2 % 2.7 % + 2.4 ns 2.7 % + 2.4 ns 3.3 % 3.3 % 3.5 % 4.7 % 2.7·10 ⁻⁹ V/ $\sqrt{\text{Hz}}$ 2.8 % + 0.2 dB 2.8 % + 0.2 dB 1.1 % + 0.05 μs	Direct measurement of a standard signal	A 04-55/31 (ČSN EN 12668-1)	
2*	Ultrasonic thickness gauges Low voltage warning Voltage operating range	1 V 1 V	to 20 V to 20 V		0.87 % 0.87 %	Direct measurement of a standard signal	A 04-55/01 (ČSN EN 15317)	



Accredited entity according to ČSN EN ISO/IEC 17025:2018:

PTS Josef Solnař, s.r.o.
Calibration Laboratory
U Hrubků 170/18, Nová Ves, 709 00 Ostrava

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min. unit	max. unit					
	Current operating range Transmitter – Pulse repeating period Transmitter – Impulse voltage amplitude Transmitter – Pulse decay amplitude Transmitter – Pulse rise time Transmitter – Pulse duration Min. and max. measurable thickness Thickness resolution	20 mA 0.1 ms 1 V 1 V 0 ns 0 ns 1 mm	to 2,000 mA to 10 ms to 400 V to 400 V to 500 ns to 500 ns to 100 mm 0.1 mm		0.43 % 0.50 % 3.2 % 3.2 % 2.7 % + 2.4 ns 2.7 % + 2.4 ns 0.04 mm 0.04 mm			
3*	Tangential magnetic field / Hand magnets	1.5 kA/m	to 15 kA/m	50 Hz	7.7 %	Comparison with the standard	A 04-53/41a (ČSN EN ISO 9934-3)	
4*	AC current / Current generators	0 A	to 2,000 A	50 Hz	4.9 % + 8 A	Comparison with the standard	A 04-53/51a (ČSN EN ISO 9934-3)	
5*	Stationary magnetization equipment Tangential magnetic field AC current	2 kA/m 0 A	to 6 kA/m to 2,000 A	50 Hz 50 Hz	7.7 % 4.9 % + 8 A	Comparison with the standard	A 04-53/61a (ČSN EN ISO 9934-3)	
6*	Meters of magnetic field intensity (teslameters, gaussmeters, magnetometers) DC tangential magnetic field AC tangential magnetic field DC tangential magnetic field AC tangential magnetic field	0.5 kA/m 0.5 kA/m 1.5 kA/m 1.5 kA/m	to 1.5 kA/m to 1.5 kA/m to 30 kA/m to 30 kA/m	50 Hz	2.0 % 3.0 % 0.8 % 1.2 %	Comparison with the standard	A 04-53/32 (ČSN EN ISO 9934-3)	



Accredited entity according to ČSN EN ISO/IEC 17025:2018:

PTS Josef Solnař, s.r.o.
Calibration Laboratory
U Hrubků 170/18, Nová Ves, 709 00 Ostrava

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min. unit	max. unit					
7*	Eddy current defectoscopes							
	Generator frequency	0.1 kHz	to 1,000 kHz		0.011 %	Direct measurement of a standard signal	A 04-51/29 (ČSN EN ISO 15548-1)	
	Receiver – f_{lm} , lower limit frequency	1 kHz	to 100 kHz		2.4 %			
	Receiver – f_{um} , upper limit frequency	1 kHz	to 100 kHz		2.4 %			
	Receiver – f_0 , medium frequency	1 kHz	to 100 kHz		2.5 %			
	Receiver – Δf , bandwidth	1 kHz	to 100 kHz		5.7 %			
	Receiver - attenuator accuracy	0 dB	to 30 dB	1 kHz to 100 kHz	0.43 dB			

¹ Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

² The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95%. If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected.

³ If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes).

Explanatory notes:

SW Screen Width

SH Screen Height

