

# Ultrasonic Thickness Tester PCE-USC 20



PCE-USC 20 is a portable or benchtop ultrasonic thickness tester or ultrasonic thickness gauge with a 5.7" TFT color LCD screen. This ultrasound-based thickness meter uses one or two contact transducers (four different probes included; 90 °, 70 °, 60 °, 45 °) to measure material or wall thickness, detect flaws or defects in welds, and monitor the effects of corrosion on pipes and tanks.

PCE-USC 20 is an ultrasonic thickness gauge used for non-destructive testing (NDT) and inspection in a wide variety of applications in industries such as chemical, oil and gas, metallurgical, manufacturing, quality control, metalworking, welding, machining, engineering, product research and development, construction, transportation and aerospace.

- ▶ Measurement range: 0.5 ... 9999 mm (steel; longitudinal wave)
- Operating frequency range: 0.5 ... 20 MHz
- ▶ Sound velocity: 1000 ... 15000 m/s (continuously adjustable)
- ▶ AVG and DAC evaluation methods, display and probes delay, damping and reinforcing functions, export and reporting functions
- ▶ Saves up to 500 records to memory
- ▶ Lightweight design for ease of portability
- ▶ Complies with EN12668-1

# Specifications

Measurement range	0.5... 9999 mm (longitudinal shaft steel), continuously adjustable
Sound velocity	1000... 15000 m/s, continuously adjustable, coarse adjustment
Displaydelay	-10 ...2000 mm
Probedelay	0.00 ...199.9 $\mu$ s
Transmittingimpulse	400 Vnegative signal peaks
Damping(impulse generator)	50 / 100/ 200 / 500
Work mode	One- ortwo-probe measurement
Operatingfrequency range	0.5 ...20 MHz
Pulse repetitionfrequency	40 / 250/1000 Hz optional
Amplification/ gain (receiver)	0 ... 110dB
Rectification(receiver)	Wholewave, positive half wave, negative half wave, high frequency representation
Alarmlimits	LimitA (Gate A) and Limit B (Gate B), Adjustable as positive or negative peak with automatic (visual or audible)alarm
Measurementmode	Limitvalue / Extreme value mode
Measurementdeviation horizontal linearity	$\leq 0.1$ %
Measurementdeviation vertical linearity	$\leq 3$ %
Excesssensitivity	$\geq 62$ dB
Dynamicrange	$\geq 40$ dB
Resolutionremote field	$\geq 30$ dB
Samplingrate	400 MHz
Measurementdata storage	500records
Signal reproduction	Permanentrecording of signals with the playback of dynamic echoes
Surfaceadjustment	Automaticadjustment of the error position of the angled probes
Automaticamplification	20 ... 80%, in 1 % steps
Menulanguage	English,Chinese
Interface	USB-A,USB-B, Ethernet
Display	5.7" TFT color LCD (640 x 480 pixels)
Operatingtemperature	-10 ...+50 °C
Powersupply	AC: 100... 240 V DC: 15 V / 4 A
Battery	Li-ionbattery (10.8 V, 5200 mAh)
Batteryoperating time per charge	>6hours
Protectionclass	IP54
Weight	1.4 kg(incl. battery)

# More information

Manual



More product info



Similar products



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