MT160 Metal Ultrasonic Thickness Gauge 0.1/0.01mm

Product Details:

The **model MT160** is a digital ultrasonic thickness gauge. Based on the same operating principles as SONAR, the instrument is capable of measuring the thickness of various materials with accuracy as high as 0.1millimeters. It is suitable for a variety of metallic and non-metallic materials.

Applications:

Model	Freq MHZ	Diam mm	Measuring Range	Lower limit	Description
N02	2.5	14	3.0mm ~ 300.0mm(In Steel) 40mm (in Gray Cast Iron HT200)	20	for thick, highly attenuating, or highly scattering materials
N05	5	10	1.2mm ~ 230.0mm(In Steel)	Φ20mm×3.0mm	Normal Measurement
N05 /90°	5	10	1.2mm ~ 230.0mm(In Steel)	Φ20mm×3.0mm	Normal Measurement
N07	7	6	0.75mm ~ 80.0mm (In Steel)	Φ15mm×2.0mm	For thin pipe wall or small curvature pipe wall measurement
HT5	5	12	3 ~ 200mm (In Steel)	30	For high temperature (lower than 300℃) measurement.

Specifications:

1) Display:4.5 digits LCD with EL backlight.
2) Measuring Range:0.8 ~ 300mm (in Steel).
3) Sound Velocity Range: 1000~9999 m/s.
4) Resolution:0.1mm
5) Accuracy: ±(0.5%Thickness+0.04)mm, depends on materials and conditions
6) Units: Metric/Imperial unit selectable.
7) Four measurements readings per second for single point measurement, and ten per second for Scan Mode.
8) Memory for up to 20 files (up to 99 values for each file) of stored values.
9) Power Source:Two “AA” size, 1.5 Volt alkaline batteries. 100 hours typical operating time (EL backlight off).
10) Outline dimensions:150×74×32 mm.
11) Weight:245g

Competitive Advantage:

1) Capable of performing measurements on a wide range of material, including metals, plastic, ceramics, composites, epoxies, glass and other ultrasonic wave well-conductive materials.
2) Transducer models are available for special application, including for coarse grain material and high temperature applications.
3) Probe-Zero function, Sound-Velocity-Calibration function
4) Two-Point Calibration function.
5) Two work modes: Single point mode and Scan mode.
6) Coupling status indicator showing the coupling status.
7) Battery information indicates the rest capacity of the battery.
8) Auto sleep and auto power off function to conserve battery life.

Standard Package:

	No.	Item	Quantity	Note
Standard Configuration	1	Main body	1	
	2	Transducer	1	Model: N05/90°
	3	Instrument Case	1	
	4	Operating Manual	1	
Optional Configuration	5	Transducer: N02		See Table3-1
	6	Transducer: N07		
	7	Transducer: HT5		
	8	Mini thermal printer	1	Only for MT160.
	9	Print cable	1	
	10	DataPro Software	1	
	11	Communication Cable	1	

Sound Velocities:

Material	Sound Velocity	
	In/us	m/s
Aluminum	0.250	6340-6400
Steel, common	0.233	5920
Steel, stainless	0.226	5740
Brass	0.173	4399
Copper	0.186	4720
Iron	0.233	5930
Cast Iron	0.173-0.229	4400 - 5820
Lead	0.094	2400
Nylon	0.105	2680
Silver	0.142	3607
Gold	0.128	3251
Zinc	0.164	4170
Titanium	0.236	5990
Tin	0.117	2960
Epoxy resin	0.100	2540
Ice	0.157	3988
Nickel	0.222	5639
Plexiglass	0.106	2692
Polystyrene	0.092	2337
Porcelain	0.230	5842
PVC	0.094	2388
Quartz glass	0.222	5639
Rubber, vulcanized	0.091	2311
Teflon	0.056	1422
Water	0.058	1473