

Ultrasonic Thickness Meter



Model: TM-8818 (Enhanced Type, Wide Range)
TM-8816 (Functional Type)

Applications

Used for measuring thickness and corrosion of pressure vessels, chemical equipment, boilers, oil storage tanks, etc. in industries of petroleum, shipbuilding, power station, and machine manufacturing. Applicable to measure the thickness of many materials, e.g. Steel, Cast iron, Aluminum, Red copper, Brass, Zinc, Quartz glass, Polyethylene, PVC, Gray cast iron, Nodular cast iron.

Material Selection

Code	Material	Code	Material
cd01	Steel	cd07	Quartz Glass
cd02	Cast Iron	cd08	Polyethylene
cd03	Aluminum	cd09	PVC
cd04	Red Copper	cd10	Gray Cast Iron
cd05	Brass	cd11	Nodular Cast Iron
cd06	Zinc	xxxx	Sound Velocity



Features

- * With high power of emission and broad band of receiving sensitivity, the gauge can match probes of different frequencies. That makes it easy to measure the rough surface, even cast iron. It is widely used in almost all kinds of industries.
- * The model TM-8818 has bidirectional measurements, materials thickness is measurable with know velocity, Conversely velocity is measurable with know thickness.
- * Automatic memory material code and sound velocity value, convenient to use.
- * Coupling symbol indication when measuring.
- * Manual or automatic power off.
- * Applies USB, RS-232, Bluetooth data output.

DIGITAL INSTRUMENT

Specifications

Model	TM-8818	TM-8816	TM-8816C
Housing Material	Aluminum Alloy	Strong, Light Weight ABS-Plastic	
Display	Large Screen LCD		4 Digit, 10 mm LCD
Measuring Range	0.75~400 mm (45 # steel, Depend on Probe)		1.0~200 mm / 0.04~8 inch
Resolution	0.01 mm / 0.1 mm / 0.001 inch		0.1 mm 0.01 mm
Accuracy	± (0.5%n + 0.05)		
Sound Velocity	500~9,990 m/s		
Lower Limit of Pipes	Φ 15 x 2.0 mm Φ20 x 3.0 mm Determined By Transducer		
Operating Temperature	0~40°C		
Conditions Humidity	< 85%RH		
Power Supply	2x1.5V AA (UM-3) Battery	4x1.5V AAA (UM-4) Battery	
Dimensions	130x76x32mm	135x65x27mm	
Weight	340g (Not Including Batteries)	120g (Not Including Batteries)	

Standard	Main Unit	✓	✓
Accessories	Probe	5MΦ8 Standard Probe	Built-in Probe
	Coupling Agent	✓	✓
	Carrying Case	B04	B04
	Operation Manual	✓	✓

Optional Accessories	Other Special-purpose Probes	—
	RS-232C Data Cable with Software	
	Bluetooth Data Adapter with Software	

Probe Technical Parameters

Probe Model	Diagram	Measuring Range	Diameter	Frequency	Operating Temp.
5MHz Φ8 (UTG-ST) Standard Configure Probe		1.5 ~ 200 mm (Steel)	Φ 8 mm	5M Hz	0 ~ 50 °C
5MHz Φ8 (UTG-TP) Curved Surface Probe		1.5 ~ 200 mm (Steel)	Φ 8 mm	5M Hz	0 ~ 50 °C
2MHz Φ10 Plastics Measurement Probe		1.0 ~ 50 mm (Plastics)	Φ 10 mm	2M Hz	0 ~ 50 °C
2MHz Φ10 Cast Iron Measurement Probe		3.0 ~ 40 mm (Cast Iron)	Φ 10 mm	2M Hz	0 ~ 50 °C
5MHz Φ6 Thin Material Probe		1.0 ~ 50 mm (Steel)	Φ 6 mm	5M Hz	0 ~ 50 °C
5MHz Φ12 (UTG-HT) High Temperature Probe		3.0 ~ 200 mm (Steel)	Φ 12 mm	5M Hz	60 ~ 300 °C