Metrix+™
Innovative Excellence

ULTRASONIC THICKNESS GAUGE

UTM 5A+

User friendly with Type C charging

Measuring principle

Ultrasonic thickness gauge determines the sample thickness by measuring the amount of time it takes for a sound pulse, generated by an ultrasonic transducer, to travel through a test piece and reflect from the inside surface or a far wall.



Applications

Based on ultrasonic measuring principle, thickness of metal and other materials can be measured. So, it can monitor the degree of thinning, caused by corrosion, of all kinds of tubes and pressure vessels during working process, and accurately measure the thickness of all kinds of plates and processing parts. This gauge is applied widely in fields, such as petroleum, chemical, metallurgical, shipbuilding, aerospace industry, etc.

Features

- User friendly menu operation with dot matrix display.
- DC 5V/1A type C charging with 2000mAh battery
- Memory storage with statistics
- Measure material sound velocity using 1 point calibration
- Option for silent operation and auto power off for conserving battery.

Technical Specifications

Model	*Metrix+* UTM 5A+
Display	240 x 320 Dot matrix display with adjustable backlight and user-friendly menu operation.
Measuring range	1 ~ 300mm (in steel)
Accuracy	H < 10mm, ±0.1mm H >= 10mm, ±(0.1 + 1.0%H)mm H = real thickness of sample
Resolution	0.1mm/0.01mm/0.01inch
Sound velocity range	1000 ~ 9999 m/s
Units	mm, inch
Min size of tube	Φ20 * 3mm (steel)
Memory	300 sets of records
Additional functions	Menu operation, single and continuous measurement modes, alarm measurement, sound velocity measurement and probe calibration
Power supply	3.7V 2000mAh battery with type C charging
Size and weight	140 x 66 x 28.5 mm ; 0.15kg
Standard accessories	Main unit, standard probe, coupling agent, manual, charging cable, gift box

Materials

Every material has its own sound velocity, by which the sound propagates through that medium. For accurate thickness readings, the exact sound velocity has to be set before measuring. A few velocities for materials is already preset as below:

Material	Sound velocity(m/s)
Custom 1	User defined (upto 9999)
Custom 2	User defined (upto 9999)
Custom 3	User defined (upto 9999)
Aluminum	6340-6400
Steel (common)	5920
Steel (stainless)	5740
Brass	4399
Copper	4720
Iron	5930
Cast iron	4400-5820
Lead	2400
Nylon	2680
Silver	3607
Gold	3251
Zinc	4170
Titanium	5990
Tin	2960
Acrylic resin	2760
Epoxy resin	2540
Ice	3988
Nickel	5639
Plexiglass	2692
Porcelain	5842
PVC	2388
Quartz glass	5639
Rubber (vulcanized)	2311

Pictures:





Model and Specifications subject to change without notice.