

Features

- ★ Capable of performing measurements on a wide range of material, including metals, plastic, ceramics, composites, epoxies, glass and other ultrasonic wave well-conductive materials.
- ★ Transducer models are available for special application, including for coarse grain material and high temperature applications.
- ★ Probe-Zero function
- ★ Sound-Velocity- function.
- ★ Two-Point Calibration function
- ★ Coupling status Indicator showing the coupling status.
- ★ Battery status
- ★ Auto sleep and auto power off function to conserve battery life.
- ★ USB port with Protective Membrane and datapro software to process the memory data on the PC.
- ★ Adjust gain function, can easy to test the cast iron material



Display	LCD with LED backlight.
Accuracy	±0.5%Thickness +0.02mm, depends on Materials and conditions
Probe model	TM-08; 5MHz
Measuring range	0.75mm-225.0mm (in steel)
Diameter minimum	8mm
Sound velocity	1000m/s ~ 9999m/s
Application temperature	-10 ~ +60°C
Lower limit for steel pipe	5MHz probe: Φ20mm x 3.0mm
Measurement response	Four measurements readings per second for single point measurement,
Display resolution	0.01mm or 0.1mm (lower than 100.0mm) 0.1mm (more than 99.99mm)
Power Supply	2pcs 1.5V AA size, batteries.
Weight	320 g
Memory	Up to 5 files (up to 100 values for each file) of stored values

FAQ on thickness gauges:

1. Can it measure concrete floor thickness?

Unfortunately, not. Materials that are generally not suited for ultrasonic gauging because of their poor transmission of high frequency sound waves include wood, paper, concrete, and foam products. They are good for metals, plastics, fibre glass, ceramics, and glass. Please refer the table in the manual for more information.

2. Why should I need sound velocity for the thickness gauge and why should the sound velocity value be accurately entered in the meter?

The speed of sound varies in various materials and the information is necessary to have when using ultrasonic thickness gauge, as the speed the ultrasound will move through the material to obtain an accurate thickness reading

3. What is probe frequency? How does the probe look like?

There are few options available for the thickness gauge. At present ECEFast is selling a right-angled probe, 5MHz model only. Other models are available on request. 2M, 5M, 7M.

4. What is the life span of the probe?

The surface of the probe is allyl resin, after long time of usage, its roughness will increase and the sensitivity will drop. If this is the reason for the error then grind the surface with sand paper or oil stone to make it smooth and has good parallelism. If the error is still there, the probe must be replaced

5. What are the common errors occur in measuring ultra-thin object?

When measuring ultra-thin object, sometimes the readout is twice the actual thickness. This is because of double refraction. There is another error called “pulse envelop, cyclic leap” which results in the measured value larger than the actual thickness. To prevent these kinds of errors, repeat the measurement to check the results

6. What are the common errors in measuring the thickness?

Un-parallel surface: The surface of the object must be parallel to or co-axial with the surface to be sensor, otherwise, it will cause measuring error or even no display.

Rough surface: Before measuring, please smooth the surface of object by grinding, polishing or filing, etc. or use coupling agent with high viscosity for that.

Temperature: The transmitting speed of ultrasonic wave are influenced by temperature. If it has a high accuracy requirement on the measurement, choose the high temperature sensor

Coupling agent: The coupling agent is for transmitting high-frequency energy between the probe and the object. If the type of agent is wrong, or the utilization is wrong, it will cause error or flashing coupling indicator, and it will be impossible to measure. The coupling agent should be used in proper amount and be coated evenly. It is very important to select proper coupling agent. When it is used on a smooth surface, you'd better use an agent with low viscosity (such as light engine oil, etc.). When it is used on a coarse object surface, or vertical surface and top surface, one can use agent with high viscosity (such as glycerine grease, lubricating grease, etc.).