



MT190 Multi-mode Ultrasonic Thickness Gauge



Overview

Mitech MT190 multi-mode ultrasonic thickness gauge, based on ultrasonic measuring principle, it can perform thickness measurements on a wide range of materials including metals, plastic, ceramics glass and other ultrasonic well-conductive materials. It is also capable for measuring the sound velocity of the object with known thickness. Compared with the traditional measurement method, the advantage of ultrasonic thickness gauge is that it can finish the measurement only if it contacts with one side of the measured workpiece. Its unique performance of capable for testing thickness through the coating provides efficient solution for testing the workpiece of coated surface or corrosion materials. It can test the workpiece directly without needing to get rid of the surface coating. It's widely used for monitoring the production equipments' various pipelines and pressure vessel corrosion reducing degree in the fields of petroleum, chemical, metallurgy, shipbuilding, aviation, aerospace and so on. It also can be used for making accurate measurement to various plates and machining parts. It is the necessary professional precision instrument for improving the production efficiency and qualification rate as well as saving cost.

Technical Parameters

Technical Specifications	Technical Parameters
Measuring Range	Support two modes for thickness measurement Pulse-Echo mode: (0.65~600)mm Echo-Echo mode: (3~60)mm
Accuracy	$\pm 0.05\text{mm}$ ($\leq 10\text{mm}$); $\pm (0.5\%H + 0.01)$ mm ($> 10\text{mm}$); H refer to the thickness of workpiece
Measurement Frequency	7 times per second for single point measurement, 16 times per second for scan mode measurement.
Display	High contrast Segment LCD display (support for EL backlight display)
Resolution	0.1mm/0.01mm selectable
Sound Velocity Range	(1000~9999)m/s (Capable for measuring the sound velocity of the object with known thickness)
Probe Calibration	Zero-point calibration, two-point calibration
Thickness Measurement Mode	Single Point measurement, min/max measurement, differential measurement
Data Storage	Capable for saving and managing 20 groups of thickness data (up to 100 values for each group)
Units	Metric/Imperial unit selectable
Communication	USB 1.1 interface for connecting with PC for printing
Power Source	With two "AA" size alkaline batteries, it can work above 50 hours continuously with default brightness.
Auto Power Saving	Auto shutdown power saving function
Material	ABS engineering plastic
Size	150mm×74mm×32mm
Weight	245g

Features

- Capable of performing thickness measurements on a wide range of material including metals (such steel, cast iron, aluminum, copper and so on), plastic, ceramics, composites, epoxies, glass and other ultrasonic well-conductive materials.
- With two thickness measurement modes: Pulse- Echo mode and Echo-Echo model, it can measure the thickness through the coating without calculating the coating thickness.
- With large storage capacity and lower power design, it can standby super long time above months.
- Capable for measuring the sound velocity of the object with known thickness, it can meet the thickness testing requirements for various materials.