

Ultrasonic Thickness Gauge



***High Accuracy
Ultrasonic Thickness Measurement***

POWERHOUSE OF ULTRASONIC TECHNOLOGY[®]



Ultrasonic Thickness Gauge

Ultrasonic Thickness measurement is non destructive method of measurement and particularly, suitable for components having access only from one side, where conventional gauge cannot be used. It is especially useful in measurement of thickness of pipes, pressure vessels. We have automated systems for online thickness measurement in pipes or plates and for applications like corrosion monitoring, bond testing, lamination detection, material characterization. The testing is fast, reliable and with high accuracy.



Main Features UX 4560

- Multi mode: Pulse-Echo mode and Echo-Echo mode, thickness testing through the coating thickness without calculate the coating Thickness
- Measurements on a wide range of materials, including metals, plastic, ceramics, composites, glass and other ultrasonic wave well conductive materials
- With Probe-Zero function and two point calibration function, it can correct the system error automatically
- High-Accuracy real-time clock for accuracy in Thickness measurement
- Units: Metric/Imperial unit selectable
- Automatically V-Path correction
- High-Performance CPU chip, to measure ten readings per second
- TFT LCD color large display 320X240, adjustable brightness black light
- Memory, to save 10,000 thickness measurement
- Internal Bluetooth module and USB 2.0 communication port, to download data on PC
- The Instrument can update procedure online
- Transducers available for special applications, including for coarse gain material and high temperature applications
- Coupling status indicator for coupling status
- Single point and scan mode. Ten measurements reading per second, in single point mode, and sixteen per second in scan mode
- Battery Information Indicates the rest capacity of the battery
- Auto sleep and auto power off function to conserve battery life
- Three checking models: single point measurement, maximum measurement and D-value measurement
- Upper and Lower Thickness limit setting, alarm for out of set limits
- Sound-Velocity-Calibration function, to improve the accuracy

Technical Specifications UX 4560

- Resolution: 0.1mm/0.001mm/0.001mm
- Accuracy: $\pm 0.04\text{mm}$ ($< 10\text{mm}$); $\pm 0.4\% \text{H}$ ($> 10\text{mm}$) H refer to the thickness of workpiece
- Measurement period: 10 times per second
- Memory for up to 100 files (up to 100 values for each file) of stored values
- Power source: Two "AA" size. 1.5 Volt alkaline batteries, 100 hours typical operating time.(EL back light off)
- Range: Pulse-Echo mode: (0.6500)mm (in steel)
- Echo-Echo mode: (3.0~100)mm (in steel with P5EE probe)
- Sound Velocity Range: (100~999) m/s
- Communication: USB 2.0 and Support Bluetooth
- Languages: English/Chinese
- Outline Dimensions: 150mm x 74mm x 38mm
- Weight: 295 grams
- Display: Colorful large display 320X240 TFT Lcd with adjustable backlight

Operating Conditions:

Operating Temperature:- $0^{\circ}\text{C} \sim +50^{\circ}\text{C}$; Storage Temperature:- $20^{\circ}\text{C} \sim +70^{\circ}\text{C}$; Relative Humidity $< 80\%$.
The Surrounding environment should avoid of vibrations, strong magnetic field, corrosive medium and heavy dust.

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Technical Specifications

| | |
|---------------|---|
| Material | Metals, plastics, glass etc. (with suitable probe) |
| Range | 1.2mm to 300mm* (in steel- flat) |
| Probes | Dual Crystal - (TR) |
| Keypad | Sealed, colour coded key pad |
| Resolution | 0.1mm(display between 0.1 & 0.01) |
| Calibration | One step calibration |
| Accuracy | ±0.1mm upto 25mm, ±1% above 25mm |
| Display | LCD with backlight, display for thickness, velocity, low battery, memory |
| Memory | 9960 readings |
| Battery | NiMH Re-chargeable battery 3.6V |
| Charger | External charger, 230V AC supply |
| Ambient Temp | 0° to 50° c |
| Weight | 200 gm |
| Case | Weather resistant moulded plastic |
| Communication | RS 232 Interface |



Main Features UX 4510

- Light weight, easy to use.
- Thickness measurement possible for one side access components.
- On line thickness monitoring, with suitable fixtures.
- Microprocessor controlled with facility to store calibration and measured data.
- Auto memory (with time selectable from 1 to 10 sec.)
- Color mapping which is suitable for large plates where readings are taken at various points on grid, which are represented with different colors to get quick idea about thickness variation.

Accessories

* Range depends on material & probe:

- Probe 5MHz range between 1.2 to 200mm
- Probe 2.5MHz range between 3 to 500mm
- High temperature probe range between 3 to 100mm

* For pipes also (minimum ϕ 25mm)

* Standard set comprises of:

- Calibration block (steel)
- Probe ϕ 6.00mm, 5 MHz
- Software CD, RS-232 cable
- Batteries
- Charger



Ultrasonic Testing & Inspection Solutions

We have successfully been catering to the needs of various industries.



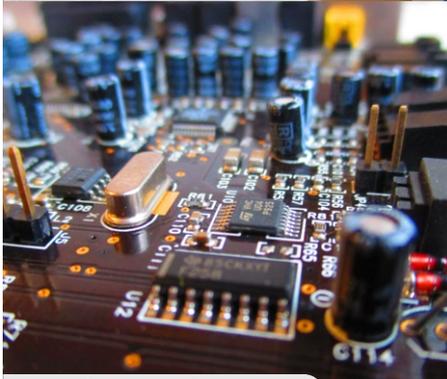
Aerospace



Automotive



Defense & Security



Electronics



Environment



Energy



Metals



Mining



Oil & Gas



Plastics



Railway



Research

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