

INTRODUCTION

The Metravi UTG-01 Ultrasonic Thickness Gauge (2024 model) is an intelligent hand held product which adopts the principle of ultrasonic measurement and is controlled by a micro processor and provides quick and precise measurements of thickness for most industrial materials.

When the ultrasonic wave emitted by the probe pass through the measured subject and reaches the material interface, the wave is reflected to the probe to determine the thickness of the testing object, by precisely measuring the time it takes for the ultrasonic wave to travel through the material.

Hence, the thickness of a wide range of materials can be measured quickly and without damage and destruction.

This device is suitable for a wide range of industrial applications and can measure the thickness of high density materials like steel aluminium etc.

It is a commonly used thickness measuring instrument in manufacturing industry, metal processing industry and other industries.

With a resolution: 0.01mm/0.1mm, for composite materials without sound velocity standards, you can also use the measurement of sound velocity function for testing.

Works on:

Iron plate, steel plate, stainless steel, aluminium, purple/brass, zinc, tin, lead, glass, PVC, acrylic plate, nylon, silver, gold, titanium, nickel, ceramic, quartz, etc.

FEATURES

- Using single chip micro processor technology, resolution is up to 0.01mm.
- Stable measurement and fast reaction speed.
- Continuous and single measurement switching function.
- Sound velocity measurement function.
- Preset fixed sound velocity value of common materials, which can be quickly selected and measured according to the material to be measured.
- Probe port automatically identifies the probe transmitting and receiving signals, and the user can directly insert the probe into the host when replacing it.
- 10 units data storage.
- Alarm function, user can customise the upper and lower limit alarm values and buzzer alarm sounds if the measurement result is outside the set limits.

*Technical Specifications & Appearance are subject to change without prior notice



TECHNICAL SPECIFICATIONS

Measuring Range	: 1.0~350mm (45#Steel)
Operation Frequency	: 5MHz /2.5MHz (2.5MHz using special probe)
Minimum Limit for Tube Curvature Measurement	: Ø20x3mm (45#Steel)
Resolution	: 0.01mm (1~99 mm); 0.1mm (100 mm)
Accuracy	: H<10mm, ±0.05mm 10-99mm: $\leq \pm(0.01+H/200)$ mm >100mm: $\leq \pm(0.1+H/100)$ mm (H: thickness of material to be measured)
Power Supply	: 3x 1.5V AA alkaline batteries; lasts about 20 hours
Sound Velocity Range	: 1000~9999 m/s
Operating Temperature	: 0°C~40°C, Probe 0°C~60°C
Weight	: 153gms excluding battery
Dimensions	: 72x135x36 mm
Accessories	: Ultrasonic Probe (5MHzφ10mm), 50ml Coupling Agent, 3 x 1.5V AA Alkaline Batteries, User Manual
Calibration Test Block	: Instrument is inlaid with a 4.00mm Calibration Test Block with a tolerance of ±0.05mm
Display	: 4 digits Backlit LCD
Auto Power-off	: Available
Low Battery indication	: Available
Auto Linear Compensation	: Available
Data Logging	: 10 measurements



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