UNIREW GROUP CO.,LTD

URNDT ACCUR-1 Ultrasonic Thickness Gauge

summary:

URNDT ACCUR-1 Ultrasonic Thickness Gauge is a new generation of intelligent ultrasonic thickness gauge, using the latest high performance and low power consumption microprocessor technology, based on the principle of ultrasonic measurement, to measure the thickness of metal, glass, ceramics and other materials, and the materials of sound velocity measurement. Is widely used in all kinds of plate, pipe wall thickness, the boiler container wall thickness, all kinds of pipeline and pressure vessel, thickness measurement, monitor them in the process of using the degree of corrosion after thinning. With communication software, can be connected to computer.

Main function:

1. Suitable for measuring metal (such as steel, cast iron, aluminum, copper, etc.), plastic, ceramic, glass, glass fiber and other any good conductors of ultrasonic thickness.
2. Can be equipped with a variety of different frequency, chip size, double crystal probe use.
3. Have probe zero calibration, a two-point calibration function, can be automatically on

system error correction.

4. Thickness can be known the sound velocity measurement, in order to improve the accuracy of measurement.
5. With functions of coupling status alerts.
6. LED backlight display, convenient to use in dark environment.
7. The battery indicator function, can real-time display the battery remaining power.
8. With automatic power saving function dormancy, automatic shutdown, etc.
9. Small, portable, high reliability, suitable for bad operating environment, vibration, impact resistance and electromagnetic interference.
10. The background data processing function; PC communication function; printing support. RS232 port, offline data processing software.
11. With the function of catch the minimum thickness value.

Technology Parameter:

Measuring range	0.75mm~300.0mm(0.03inch~11.8inch)
Units	Metric/Imperial unit seletable
Sound Velocity Range	1000m/s~9999m/s(0.039~0.394in/μs
Display resolution	0.01mm or 0.1mm(lower than 100.0mm) 0.1mm(more than 99.99mm)
Accuracy	±(0.5%Thickness+0.04)mm,depends on Materials and conditions
Data Memory	5 files(up to 100 values for each file)of stored values 5 Sound Velocity of stored values
Power Source	2pcs 1.5V AA size,batteries.250 hours typical operating time(LED backlight off)
Outline Dimensions	150mm*74mm*32mm
Workpiece surface temperature	- 10 ~ 60 ℃
The minimum thickness value capture capacity	With a minimum thickness value capture capacity
Standard configuration	URNDT ACCUR-1 host, 5MHz probe, 4 mm steel calibration block, coupling agent, 2 batteries (non - Aviation), Software, RS232 Connect Cable

Measurement cycle	4 times/SEC, scanning of single point measurement model 20 times per second.
Weight	238 g
Power source	Type AA alkaline battery 1.5 V (2)
Optional attachments	2 MHZ, 7 MHZ and 5 MHZ (high temperature)

Optional probe and parameters:

Model	Freq MHZ	Diam mm	Measuring Range	Lower limit	Description
N02	2	14	3.0mm～300.0mm（In Steel） 40mm (in Gray Cast Iron HT200)	20	for thick, highly attenuating, or highly scattering materials
N05	5	10	1.2mm～230.0mm（In Steel）	Φ20mm×3.0 mm	Normal Measurement
N05 /90°	5	10	1.2mm～230.0mm（In Steel）	Φ20mm×3.0 mm	Normal Measurement
N07	7	6	0.75mm～80.0mm（In Steel）	Φ15mm×2.0 mm	For thin pipe wall or small curvature pipe wall measurement
HT5	5	14	3～200mm （In Steel）	30	For high temperature (lower than 350℃) measurement.
HT7	5	14	3～200mm （In Steel）	30	For high temperature (lower than 500℃) measurement.

Advantage comparison:

The advantages of ultrasonic thickness gauge URNDT ACCUR-1	The same price of other types of Thickness Gauge
Menu operation, high brightness LCD LCD display, LED backlight	Fault code EL display, power consumption, dark environment can not see
Sound speed adjustable, can be a variety of materials measurement	Low-cost manufacturers only 5920 a steels velocity
It can be matched with various probe (coarse, small size, high temperature) without the need for calibration, automatic calibration	Multiple probes cannot identify automatically
A minimum acquisition indicator	No minimum thickness capture capacity
Can store 500 sets of data and 5 documents	Can store 50~100 data set
The internal use of highly integrated motherboards, chips are imported, stable performance!	Most of the two circuit boards, using a homemade device mostly, unstable performance
With USB interface, can be connected to a computer with a data processing software	No interface and data software

Application :

Various parts of instruments, to provide fast, accurate measurement of the plate and the parts processing table. Another important application of this watch is monitoring the production equipment of all kinds of piping and pressure vessel, in the use of monitor to the refinement degree. Can be widely used in petroleum, chemical, metallurgy, shipbuilding, aviation, aerospace and other fields.