

WT-610/WT-620/WT-630

Digital Ultrasonic Thickness Gauge



<http://www.worltech.com>

WT-600 SERIES

Accuracy thickness measurement performance and the simplicity you need ...

WT-600 series digital ultrasonic thickness gauges are handheld, microprocessor controlled instruments for measuring a wide variety of fabricated parts, especially where conditions allow access to one side only. Whether you're spot checking thickness of incoming material, performing quality control on finished parts, or monitoring machining operations, the WT-600 series shorten inspection time and reduce costs.

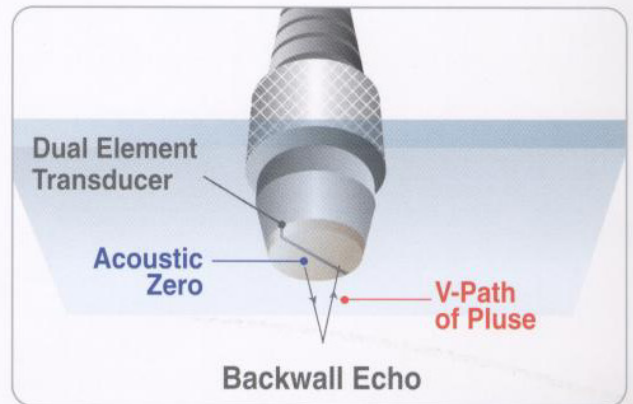
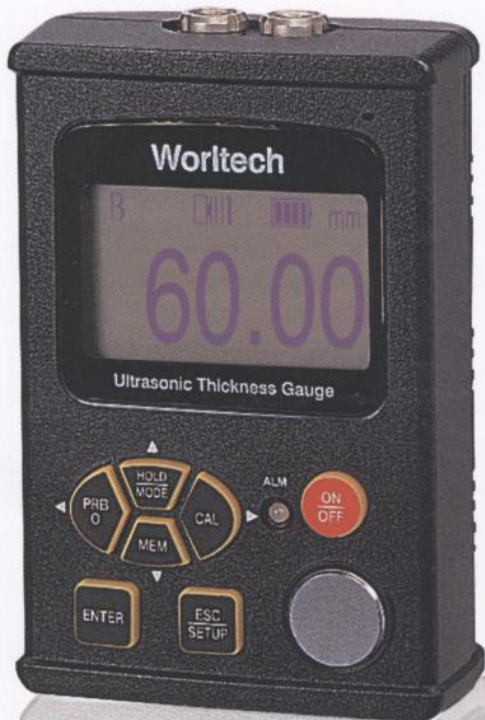
Benefit of Ultrasonic Testing

The ultrasonic Pulse/Echo principle uses the round-trip travel time of a sound wave through the part wall to measure thickness. Sampling, cutting coupons, disassembly, or destroying your part are no longer necessary. And you can measure thickness anywhere on your part with access to only one side.

Dual Element Thickness Measurement

A Pulse/Echo ultrasonic thickness gauge determines the thickness of a part or structure by accurately measuring the time required for a short ultrasonic pulse generated by a transducer to travel through the thickness of the material, reflect from the back or inside surface and be returned to the transducer.

WT-610 WT-620 WT-630
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Wide range of corrosion/erosion applications



- Measure remaining wall thickness of corroded or eroded tank
- Power plants, Petrochemical plants, Refineries, Aerospace, etc.
- Measure remaining wall thickness of corroded or eroded pipe
- Metallic, PE, Oil, Heating, Gas, Water Supply and Drainage Pipeline

No need to remove coatings (paint)

WT-600 series will measure the thickness value including the coating layer in the digital thickness reading.

WT-630 is the "best" choice ... to satisfy your thickness measurement needs

B-Scan provides a graphical thickness cross-sectional view of the workpiece being inspected. It is very helpful in quickly identifying laminated or heavily thinned areas. Pit size and contour can be easily mapped giving a representative view of the extent of corrosion pit damage.



Alarm Mode

If the measurement falls below your minimum specified value or is over your maximum specified value, the red LED will light and the beeper will sound. The green LED will light to indicate an acceptable thickness.

Average Mode

If you intend to know the uniformity of certain area, you can use this function. The unit will calculate the average value of 4 times measured data automatically.

```
M  [||||] mm
4.07  4.09
4.08  4.05
AVR: 4.07
```

Differential Mode

The unit will display the positive or negative difference of your minimum specified value.

High Speed Scan Mode

By dragging the probe along any given area, the unit will display the thinnest reading it found at a rate of 20 readings per second.

Statistics Data Mode

The unit will display velocity, minimum, maximum and average value of measured data.

```
VEL> 5925 m/s
MIN> 0.00:0000
MAX> None
AVR> 0.00
```

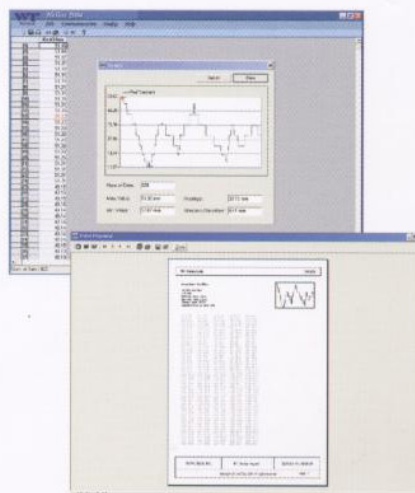
WT-630 for Accurate Data Collection and Simple Data Management

Using the on-board data logger makes collecting data with the WT-630 an easy operation for on inspector.

In the Normal, Alarm, Average and Differential mode, readings are automatically stored in the on-board data logger by pressing the **MEM** key.

A total 1,500 readings can be stored and divided into 50 data groups in the WT-630's data logger memory.

Helios 2004[®] is an intuitive Windows[™] 95/98/Me/XP thickness data control program that simplifies the transfer, storage, analysis, and documentation of thickness data.



Easy to Use

Installation of Helios 2004[®] is easy through the automated installation program.

Direct WT-630 Communications

Simple, fast, bi-directional communication (send/receive) is provided with the model WT-630 B-Scan thickness gauge.

Copy and Paste

Provides a quick and easy way to get inspection data into standard spreadsheet (MS-Excel) program.

Print reports through all Windows[™] 95/98/Me/XP supported printers.

Real-time Trigger Function

WT-630 B-Scan thickness gauge will transfer real-time B-Scan thickness data to PC directly.

WT-610/WT-620 / WT-630 Accessories and Specifications

Base Instrument Package

- ① WT-610 or WT-620 or WT-630 Thickness Gauge
- ② WT-DS0510 5MHz 1/4 inch Transducer (Side-in Type)
- ③ WT-A01-N Aluminum Case
- ④ WT-C35-N Couplant (120 ml)
- ⑤ Operating Manual ⑥ Battery Charger

WT-630 Package

- ① Helios 2004 Data Control Software Program
- ② RS-232 Data Cable

Accessories

- ① WT-DS2516 2.25MHz 1/2 inch Transducer (Side-in Type)
- ② WT-DS0510 5MHz 1/4 inch Transducer (Side-in Type)
- ③ WT-DT0510 5MHz 1/4 inch Transducer (Top-in Type)
- ④ WT-HDT0510S 5MHz 1/4 inch Transducer (High-Temperature)
- ⑤ WT-DS0505 5MHz 3/16 inch Transducer (Side-in Type)
- ⑥ WT-TB05-N 5-Step Test Block (Steel)



Specifications

	WT-610	WT-620	WT-630
Operating Principle	Ultrasonic Pulse/Echo		
Measurement Modes	Normal and Average Mode	Normal, Alarm, Differential, Average, Scan and High Speed Scan Mode, /B-Scan Mode (WT-630)	
Measuring Range	0.025 to 19.99 inches (0.63 to 500 mm) in mild steel		
Measuring Resolution	0.001 inch (0.01mm)		
Material Velocity Range	20,000 to 590,000 in/s (500 to 15,000 m/s)		
Display Type	5 digit, Graphic LCD Backlight is selectable on/ off/ auto(illuminates only when taking a measurement) Measurement displayed in inch and mm		
Display Languages	English, Korean & Other Country (Optional)		
Power Supply	1ea. 3.6V Li-ion Rechargeable Battery		
Battery Life (operating time)	Over 20 hours at 25% duty cycle		
Auto Shut-Off	After 2 minutes of non-use		
Data Logger Memory	—	Up to 1,200 readings	Up to 1,500 readings
Number of Data Group	—	Up to 10 fixed groups	Up to 50 groups*
Data Output Port(WT-630)	—	Serial : asynchronous; 0, +5V TTL, 8bit, 1 start bit, 1 stop bit, 9600 baud RS232C : Bipolar logic levels provided by serial PC	
Operating Temperature Range	+15°F to +125°F (-10°C to +50°C)		
Dimensions (H x W x D)	3.70" x 2.48" x 1.3" (94 mm x 63 mm x 33 mm)		
Weight	6.7 oz (0.19kg) including battery		
Warranty	A full one-year warranty on parts and labor		

* Setting and editing are adjustable

Compatible Transducer Specification

Product Code	Nominal Frequency	Contact Diameter	Measuring Range (Base upon Carbon Steel)	Misc Info (Cable 4 ft. length, LEMO Connector)
WT-DS2516	2.25MHz	1/2 inch (12.7 mm)	0.078" ~ 19.68" 2.0 mm ~ 500 mm	Side Potted
WT-DT0510	5MHz	1/4 inch (6.35 mm)	0.04" ~ 9.84" 1.0 mm ~ 250 mm	Top Potted
WT-DS0510	5MHz	1/4 inch (6.35 mm)	0.04" ~ 9.84" 1.0 mm ~ 250 mm	Side Potted
WT-HDT0510S	5MHz	1/4 inch (6.35 mm)	0.04" ~ 9.84" 1.0 mm ~ 250 mm	Top Potted High-Temperature(650°F)
WT-DS0505	5MHz	3/16 inch (4.76 mm)	0.04" ~ 4.72" 1.0 mm ~ 120 mm	Side Potted

Specifications subject to change without notice

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