

Digital Ultrasonic Thickness Testers

Time TT300



Features

- Easy to use handheld thickness gauge
- Suitable for most metallic and non-metallic materials
- Display current thickness or minimum thickness (menu selectable)
- Upper-lower limits setting and sound alarm
- Memory for 500 stored values
- Two point calibration
- Display resolution 0.1 mm/0.01 mm selectable
- Display in mm or inch
- LCD display with adjustable backlight
- Low battery indicator
- RS232 output for data transfer

Technical Specifications

Measuring Range :	1.2mm - 225.0 mm with 5MHz transducer 5.0mm - 300.0 mm with 2MHz transducer
Operating Temperature :	-10 deg C to 60 deg C
Lower Limit Steel Pipes :	Diam 20 mm x 3.0 mm
Display Resolution :	0.1 mm / 0.01 mm
Data Output :	RS232 Output for Printer or PC
Measuring Accuracy :	+/-1% thickness + 0.1 mm
Sound Velocity :	1000 m/s - 999 m/s
Power Supply :	2 pcs AA batteries 1.5V
Battery Life :	100 hours without backlight
Dimensions :	152 mm x 74 mm x 35 mm
Weight :	370 g

Optional probes

<i>Transducer</i>	<i>Measurement Range</i>	<i>Contact Area Diameter</i>	<i>Frequency (MMz)</i>	<i>Operating Temp.</i>
TSTU32	5.0 mm - 300.0 mm (Steel)	22mm	2 MHz	-10 deg C to 60 deg C
5P Diam 10	1.2 mm - 225.0 mm (Steel)	10mm	5 MHz	-10 deg C to 60 deg C

Standard Package

- Main unit
- Transducer 5P 10
- Rubber jacket
- Ultrasonic couplant
- Batteries AA 1.5V x 2
- Screwdriver
- Instruction manual
- TIME certificate
- Warranty card
- Carrying case

Optional accessories

- Transducer TSTU32 (2MHz)
- Transducer 5P Diam 10(5MHz)
- Printer TA220S with cable
- Dataview Software with communication cable

STANDARD VELOCITY IN MATERIALS

FOR ULTRASONIC THICKNESS GAUGES

METALS

	m/s		m/s
A ALUMINIUM	6 320 - 6 400	M MOLYBDENUM	6 250 - 6 300
ALUMINIUM 2024-T4	6 380	NICKEL	5 480 - 6 040
ASBESTOS CEMENT	2 200	PLATINUM	3 960
B BERYLLIUM	12 890	S SILVER	3 600 - 3 700
BISMUTH	2180	SILVER - GERMAN	4 750
BORON CARBIDE	10 920	MOTOR OIL (SAE 30)	1 750
BRASS	3 800 - 4 700	STEEL, MILD	5 900 - 6 100
C CADMIUM	2 770 - 2 800	STEEL, CASTING	5 850
CAST IRON	3 500 - 5 600	STEEL, STAINLESS (AUSTENITIC)	5 660 - 6 120
" " (MODULAR GRAPHITE)	5 600	STELLITE	7 050
CAST GREY MIDDLE	4 600	T TIN	3 300 - 3 330
CONSTANTAN	5 230	TITANIUM	5 900 - 6 100
COPPER	4 650 - 4 720	TUNGSTEN CARBON	6 650
CHROMIUM	6 200	TUNGSTEN	5 180 - 5 400
G GOLD	3 200 - 3 250	URANIUM	3380
INCONEL	5 820	W WATER	1 470
IRON	5 890 - 5 930	WOLFRAM	5 460
LEAD	1 960 - 2 400	ZINC	4 170 - 4 320
M MANGANESE	4 660 - 4 700	ZIRCALOY 2	4 700
MAGNESIUM	5 770 - 5 840	ZIRCONIUM	4 650
MERCURY	1 450		

NON-METAL (m/s)

A ACRYLIC	2 870	N NYLON	2 600 - 2 690
ACRYLIC RESIN	2 730 - 2 870	OIL (SAE 30)	1 740
AIR	330	P PARAFFIN WAX	2 200
ALUM. OXIDE	8 700	PERSPEX	2 860
C CERAMIC (MACOR)	5 631	PHENOLIC	1 400
CLAY	2 600	PLEXI GLASS	2 700
CONCRETE	3 650 - 4 270	POLYAMIDE	2 380
DIAMOND	17 500	POLYETHYLENE	1 900 - 2 400
DIESEL OIL	1 250	POLYURETHANE	1 780 - 1 900
EPOXY RESIN	2 650	POLYSTYRENE	2 340 - 2 400
G GLASS (FLINT)	4 260	PORCELAIN	5 600 - 5 900
GLASS (CROWN)	5 260 - 6 120	PVC	2 400
GLASS (QUARTZ)	5 570	Q QUARTZ X CUT	5 740
GLASS (WINDOW)	6 800	QUARTZ FUSED	5 980
GLYCERINE	1 920	QUARTZ GLASS	5 640
ICE	3 980	R RUBBER (BUTYL)	1 900
H HI-DENSITY POLYETHELENE	2 220 - 2 300	RUBBER (SOFT)	1 480
(GREY & WHITE NOT BLACK)		RUBBER (VULC.)	2 300
M METHYLENE-OXIDE	9 980	S SILICONE RUBBER	948
MONEL	5 360 - 5 400	TEFLON	1 350 - 1 520
MOTOR OIL (SAE 30)	1 750	WATER	1470
N NEOPRENE	1 600		

NB NOTE : THIS SCHEDULE IS ONLY A GUIDE