elcometer® MTG2 Material Thickness Gauge

Conforms to the following standards : ASTM E797, EN 14127, EN15317

With their ergonomic, rugged design, accurate and easy to use menus in multiple languages, the Elcometer MTG (Material Thickness Gauge) range of ultrasonic thickness gauges are ideal for measuring and recording material thickness and sound-velocity on a variety of substrates, in a wide range of industrial applications.

Features

- Pulsed -Echo (P-E) measurement Mode
- Pre-calibrated for measuring on steel only
- Pre-set measurement rate of 4 readings per second
- USB data output to PC or similar device

The **Elcometer MTG2 Material Thickness Gauge** with automatic transducer recognition which ensures correct probe identification even when the transducer is changed, a measurement rate of 4Hz (4 readings per second) and integral zero disc ensuring maximum accuracy of ±1%, makes the MTG2 ideal for taking basic thickness measurements.

The MTG2 is supplied complete with 5MHz, ¼" transducer and is pre-calibrated for measuring on steel only with a thickness range of up to 500mm in Pulsed-Echo (P-E) mode. Compatible with ElcoMaster™ software, individual readings can be downloaded via USB to PC or similar device for further analysis.

Packing List

- Elcometer MTG2 gauge
- 5MHz 1/4" right angle transducer
- couplant,
- wrist harness
- screen protector
- carry case
- 2 x AA batteries
- calibration certificate
- operating instructions

Technical Specifications

	MTG2	MTG4	MTG6	MTG8
Easy to use menu structure in multiple languages	●	●	●	●
Tough, impact, waterproof and dust resistant equivalent to IP54	●	●	●	●
Bright colour screen with permanent backlight	●	●	●	●
Scratch and solvent resistant display; 2.4" (6cm) TFT	●	●	●	●
Large positive feedback buttons	●	●	●	●
USB power supply via PC	●	●	●	●
Low battery indicator	●	●	●	●
Ambient light sensor, with adjustable brightness	●	●	●	●
Emergency light	●	●	●	●
Tap awake from sleep	●	●	●	●
Gauge software updates[1] via ElcoMaster TM Software	●	●	●	●
2 year gauge warranty[2]	●	●	●	●
Limits: user definable audible & visual pass/fail warnings				●
Measurement Mode				
Pulsed Echo (P-E)	●	●	●	●
Echo-Echo ThruPaintTM (E-E)		●	●	●
Velocity Mode (VM)			●	●
Measurement Rate				
4, 8, 16Hz	4Hz	4Hz	4, 8, 16Hz[3]	4, 8, 16Hz[3]
Thickness Range[4]				
P-E: 0.63-500mm	●	●	●	●
E-E: 2.54 - 25.40mm		●	●	●
Velocity Range		1250 - 10,000m/s		
Measurement Accuracy[5]		±1% or ±0.1mm		±1% or ±0.05mm
Measurement Units (selectable)		mm		mm or m/s
Repeatability / Stability Indicator	●	●	●	●
Display Mode:				
Reading	●	●	●	●
Selected statistics			●	●
Scan thickness bar graph			●	●
Run Chart			●	●
Readings and Differential				●
B-Scan cross sectional display				●
Selectable Reading Resolution				
Lo; ie 0.1mm, 10m/s	●	●	●	●
Hi; ie 0.01mm, 1m/s			●	●
On Screen Statistics				
Number of readings n; mean average ẋ; standard deviation σ			●	●
Lowest reading Lo; Highest reading Hi				●
Low limit value				●
High limit value				●
Number of readings below low limit				●
Number of readings above high limit				●
Nominal Value x				●
Range				●
Calibration Options				
Zero set: using the integral zero disc	●	●	●	●
1 - point		●	●	●
2 - point			●	●
		●	●	●

	MTG2	MTG4	MTG6DL	MTG8BDL
Material selection; present choice of 39 materials				
Factory; resets to the factory calibration		●	●	●
Velocity (speed of sound)			●	●
Known thickness value			●	●
Calibration lock: with optional PIN code unlock			●	●
Test calibration feature			●	●
Calibration memories: 3 - programmable memories				●
Measurement outside calibration warning			●	●
Data Logging				
Number of readings			1,500	100,000
Number of batches			1	1,000
Reading save function			●	●
Sequential batching; a listed-based storage of readings			●	●
Grid batching; reading storage in a 2 dimensional array				●
Fixed batch size mode; with batch linking				●
Obstruct entry; add 'obstruct' label into grid location				●
Delete last reading			●	●
Date & time stamp			●	●
Review, clear & delete batches			●	●
Alpha numeric batch names; user definable				●
Copy batches and calibration settings				●
Live reading trend graph in batching mode				●
Batch review graph				●
Data Output				
USB; to computer	●	●	●	●
Bluetooth® to computer, AndroidTM & iOS devices			●	●
ElcoMaster™ software			●	●
Transducer Probe Type		Dual element		
Auto transducer recognition	●	●	●	●
Auto V-path correction	●	●	●	●
Battery Type		2 x AA		
Battery Life (approximate)		Approx 15 hours continuous use at 1 reading per second		
Operating Temperature		-10 to 50°C		
Size (w x h x d)		145 x 73 x 37mm		
Weight (including batteries, without transducer)		210g		
Part Number (with Transducer)[6]	MTG2-TXC	MTG4-TXC	MTG6DL-TXC	MTG8BDL-TXC
Part Number (gauge only)		MTG4	MTG6DL	MTG8BDL

1 Internet connection required

2 The Elcometer MTG range is extendable within 60 days from date of purchase, free of charge to two years via www.elcometer.com

3 User selectable default setting in scan mode is 16 Hz

4 Dependent on the material being measured and the transducer being used

5 Whichever is the greater

6 5MHz 1/4" right angle transducer supplied