Elcometer MTG2 Ultrasonic Material Thickness Gauge

Can be used in accordance with:
ASTM E797, EN 14127, EN15317

Elcometer MTG2 Ultrasonic Material Thickness Gauge has 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%, the MTG2 is ideal for taking basic ultrasonic 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.

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

Video

YouTube Video - An Introduction to Ultrasonic NDT using the Elcometer MTG2 Material Thickness Gauge
(Click on the image to the left to view the video)

The Elcometer MTG2 Ultrasonic Material Thickness Gauge has been designed to provide fast, accurate material thickness measurements of uncoated steel substrates - ideal for monitoring corrosion and erosion before painting.

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	●	●	●	●
Ambient light sensor, with adjustable brightness	●	●	●	●
Scratch and solvent resistant display; 2.4" (6cm) TFT	●	●	●	●
Large positive feedback buttons	●	●	●	●
USB power supply via PC	●	●	●	●
Low battery indicator	●	●	●	●
Emergency light	●	●	●	●
Tap awake from sleep	●	●	●	●
Gauge software updates[1] via ElcoMaster® Software	●	●	●	●
2 year gauge warranty[2]	●	●	●	●
Limits: 40 user definable audible & visual pass/fail warnings				●
Measurement Mode				
Pulsed Echo (P-E)	●	●	●	●
Echo-Echo ThruPaint™ (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 x̄; 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			●	●
Material selection; present choice of 39 materials		●	●	●
Factory; resets to the factory calibration		●	●	●

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Feature	MTG2	MTG4	MTG6DL	MTG8BDL
Velocity (speed of sound)			•	•
Known thickness value			•	•
Calibration Features				
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, Android™ & iOS devices			•	•
ElcoMaster® Software			•	•
Transducer Probe Type				
Dual element	•	•	•	•
Auto transducer recognition	•	•	•	•
Auto V-path correction	•	•	•	•
Battery Type	2 x AA			
Battery Life (approximate)				
Alkaline: 15 hours	•	•	•	•
Lithium: 28 hours	•	•	•	•
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
3 User selectable default setting in scan mode is 16 Hz

4 Dependent on the material being measured and the transducer being used
5 On steel
6 Supplied with Alkaline, Lithium and rechargeable can be used with the gauges, continuous use at 1 reading per second.
7 5MHz 1/4" right angle transducer supplied

Packing List

Elcometer MTG2 Ultrasonic Material Thickness Gauge
5Mhz ¼" Right Angle Dual Element Transducer
Ultrasonic Couplant
Carry Pouch
Screen Protector
Wrist Harness
2 X AA Batteries
Calibration Certificate
2 Year Warranty Extension Card
Operating Instructions