

elcometer® 208 Ultrasonic Thickness Gauge



The Elcometer Model 208 and 208/DL are simple to use hand-held Ultrasonic Thickness Gauges with the capability to measure material thickness whilst eliminating the thickness of the coating (on metal substrates only).

- Ignores the coating thickness
- Hand held and robust
- Data output
- Backlight display
- ElcoMaster™ and EDTS+ Excel link software supplied free of charge with 208DL for report generation and archiving.

Technical Specifications

Measurement Range:	0.63 - 500mm 2.54 –25.4mm - in Echo-to-Echo Mode
Velocity Range:	1250 - 10000m/s
Accuracy:	± 0.01mm
Resolution:	0.01mm
Units:	millimetres and inches
Operating Temperature:	-20 to 50°C
Keypad type:	Sealed membrane
Display:	Digit Liquid Crystal Display with Backlight
Power:	AA 1.5V Alkaline or 1.2V NiCad cell
Weight:	295g (10oz)
Size:	63.5 x 120.6 x 31.75mm
Case:	Extruded aluminium

Features

Description	Elcometer 208	Elcometer 208DL
Echo-to-Echo Mode	●	●
High Speed Scan Mode	●	●
Alarm Mode	●	●
Data Output	●	●
Data Logging		●
EDTS+ Excel Link	◇	●
EDCS+ Software	◇	◇
Part Number	C208----1	C208DL----1

● Included ◇ Optional

Part Numbers

Accessories	5MHz High Damped Transducer - For steel applications	T92016967
	7.5 MHz High Damped Transducer - aluminium, stainless steel and titanium applications	T92016968
	Ultrasonic Couplant (160ml)	T92015701
	Test Wedge 2- 25mm	TX9205243-
	Test Wedge 30- 100mm	T9205270-

The Elcometer 208 and Elcometer 208/DL are not supplied with a transducer, please either select the specific Elcometer 208 transducer above or select from the Transducer Selection Table



Elcometer offers a complete range of transducer probes, allowing you to select the most appropriate one for your application.

1. Select the measurement range
2. Choose the required material
3. Select the probe type

Note : Part Numbers in bold are Ex Stock UK

Measurement Range in steel (mm)	Material								Probe Type						Part Number (Bold & Highlighted are Ex Stock UK)	Frequency (Mhz)	Colour Code	Crystal Diameter (mm)	Wearface Diameter (mm)	
	Cast Iron	Plastic	Glass Fibre	Thin Glass Fibre	Steels	Glass	Thin Plastic	Aluminium	Potted	Straight Probe	Right Angle Probe	Microdot	High Temp. (650 deg C)	Extra Resolution						Exxon Specification
3.8-50.8	•	•	•					•	•							T92015620 T92015621 T92015622 T92015623	1	brown or yellow	12.7	15.88
1.5-101.6	•	•		•				•	•							T92015626 T92015627 T92015628 T92015629 T92015631 T92015632	2.25	red	6.35	9.53
1.5-127.0	•	•		•				•	•							T92015633 T92015634 T92015635 T92015636 T92015637 T92015638	2.25	red	12.7	15.88
1.5-50.8					•	•	•	•	•							T92015641 T92015642 T92015644	5	green	4.76	6.35
1.02-152.4					•	•	•	•	•							T92015645 T92015646 T92015647 T92015648 T92015655 T92015656	5	green	6.35	9.53
1.27-507.7					•	•	•	•	•							T92015657 T92015658 T92015659 T92015660 T92015661 T92015662	2.25	green	12.7	15.88
1.02-152.4					•	•	•	•	•						•	T92015663 T92015664 T92015665 T92015666	7.5	grey or silver	6.35	9.53
0.635-152.4					•	•	•	•	•					•		T92015667 T92015668 T92015669 T92015670	7.5	blue	6.35	9.53
1.02-152.4					•			•	•							T92015671 T92015672 T92015673 T92015674	10	white	6.35	9.53
1.52-254.0					•			•	•							T92015676 T92015677 T92015678 T92015679	10	white	12.7	15.88



Material Thickness

The thickness of materials cannot always be determined by direct measurement as access to both sides is not always possible.

The effects of corrosion and erosion at the back of a metal panel may reduce its thickness significantly yet not affect the front surface. Pipelines, for example, may appear corrosion free on the outside but can be eroded by the flow of material on the inside.

Machined or cast items may have thin walls that cannot be determined by callipers or other non-destructive tests.

The Elcometer Ultrasonic Thickness Gauge Features Explained

<i>Interface-to-Echo Mode</i>	In interface-to-echo mode, the gauge can take readings on thicker plastics and other materials between 1.65mm and 25.4mm
<i>Echo-to-Echo Mode</i>	Measurements can be taken on materials as thin as 0.15mm (0.006 inches). In echo-to-echo mode, the user can take measurements on pre-coated materials without having to remove the coating prior to measurement i.e. the gauge ignores the coating thickness.
<i>High Speed Scan Mode</i>	Identifies the minimum thickness point over a large area by moving the transducer over the surface. While the transducer is in contact with the material being measured the smallest value is held in memory and displayed when scanning is complete.
<i>PLAS Mode</i>	Specifically for use when measuring thin plastics. Please note that to use this mode, a special Graphite Delay Line must be purchased, Part Number T92016871.
<i>Differential Mode</i>	Displays the positive or negative difference between a pre-set nominal (target) thickness value and the actual measured value.
<i>Alarm Mode</i>	Allows the user to set a target so that an audible and visual alarm operates when taking measurements. If the measurement falls below a pre-set nominal (target) value a red LED will light and the bleeper sounds. A green LED will light to indicate an acceptable thickness.
<i>Data Output</i>	Allows the user to send data direct to a printer or PC.
<i>Data-Logging</i>	A storage capacity of 1000 measurements – 10 files consisting of 100 sequential storage locations. Allows the user to send data direct to a printer or PC.
<i>EDTS+ Excel link Software</i>	PC data transfer utility including generator of ASCII files and “data drop” add in for Microsoft Excel™ spreadsheets.
<i>EDCS+ Software</i>	Stand alone data management program with advance facilities for archiving, reporting, analysis and data export.

