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Elcometer 224 Model S Digital Surface Profile Gauge



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At a glance:

Built-in statistics:

- Number of readings
- Mean
- Standard Deviation
- Highest Reading
- Lowest Reading

Can be used in accordance with:		
ASTM D 4417-B	NSTM 009-32	
SANS 5772		

The Elcometer 224 S Digital Surface Profile Gauge provides an accurate way to measure surface profiles in microns and mils.

The Elcometer 224 S is an ideal gauge for quality checking the surface profile. Although the gauge has no memory, it does display statistical values as readings are taken.

The intuitive menu system, in over 20 languages, makes this gauge extremely user friendly.

The tungsten carbide tip will last for up to 20,000 readings and can then be easily replaced by the user in the field.

- Accurate and repeatable results: Accurate, immediate and repeatable results everytime. Measures profiles up to 500µm (20mils)
- Fast reading rate: 40+ readings per minute.
- Intuitive menus in multiple languages: Enables use straight from the box.
- Backlit screen:

Large backlit screen makes viewing readings easy.

- Digital display: Prevents reading interpretation errors.
- Cost effective testing:

Cost per test is significantly lower than other test methods.

Continuous read feature:

Ideal for quickly checking large surfaces.

Built-in statistics:

Statistics are available and can be displayed on the screen as readings are taken. This feature saves time when assessing large surface areas and an overall, average profile can be quickly established.

Tungsten carbide tip:

Tough tungsten carbide tip, replaceable in the field, can be used for up to 20,000 readings.

Surface Profile

Making sure that the correct roughness – or profile – has been generated on a surface prior to coating is essential.

If the profile is too low, the adhesion of the coating to the surface will be affected. Too high and there is a danger that the profile peaks will remain uncoated – allowing rust spots to occur. As the profile increase, so does the surface area - which in turn increases the amount of coating which needs to be applied. Achieving the correct surface profile enables the optimum amount of coating to be applied saving both time and monev.

There are essentially four different methods available for testing surface profile:

- Surface Comparators
- Replica Tape MethodSurface Profile
- Gauges
 Surface Roughness Testers

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	Model S	Model T
Multi language menus	•	٠
Backlit screen	•	•
Maximised gauge reading display		٠
Field replaceable tip	•	•
Rolling statistics	•	•
RS232 Data Output		۰
Bluetooth [®]		•
Stored statistics		۰
Memory		٠
High / Low reading limits		۰
Batching mode		٠
Batch review		0
ElcoMaster™ software		•
Part numbers	E224S	E224T
Packing list	Elcometer 224S gauge, zero plate, carrying pouch, probe protection cap, batteries and operating instructions	Elcometer 224T gauge, zero plate, carrying pouch, probe protection cap, batteries, ElcoMaster™ Software and operating instructions

Range	0μm to 500μm (0 mils to 20 mils)
Accuracy	±5% or ±5μm (±0.2 mils)
Resolution	1µm (0.1 mils)
Measurement speed	>40 readings per minute
Operating temperature	0°C to 50°C (32°F to 120°F)
Storage temperature	-10°C to 55°C (14°F to 130°F)
Dimensions	140 x 75 x 35mm (5.5 x 3 x 1.38")
Weight	180g (5.7oz)

Spares & Accessories	
Replacement tip (x2) pack with fixing tool	T22420053
Replacement tip (x2) pack	T22420054
Replacement tip (x5) pack	T22420095
Replacement tip protection cap	T22419793
Glass zero plate with wallet	T22420072
Gauge-to-PC Connection cable (9 pin)	T99916217
Miniprinter, UK 240V	X4569964B
Miniprinter, EUR 200V	X4569964C
Miniprinter, US 110V	X4569964D
Miniprinter gauge-to-printer connection cable (25 pin)	T99916267
Miniprinter ribbon cassettes (pack of 5)	T9769992-
Miniprinter Paper rolls (box of 20)	Т999993-

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Related Products



The Elcometer 224 T works in the same way as the model S, but has the advantage of a large built-in memory to accurately record each measurement. The memory is able to store up to 50,000 readings in 999 batches. This enables extremely quick readings to be automatically stored, ideal for measuring large surface areas.



This is an easy to use gauge that measures the peakto-valley height of a blast cleaned surface. The average of a series of measurements provides an indication of the surface roughness and allows the surfaces to be compared as blasting proceeds.

Elcometer 123



Elcometer 223

The Elcometer 223 is a battery operated digital surface profile gauge which measures the peak-to-valley height of a surface in a similar way to the Elcometer 123 analogue equivalent, but with the added benefit of a direct RS232 output for data logging.

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