

Elcometer 3000 Motorised Clemen Unit

The Elcometer 3000 Motorised Clemen Unit is a robust and accurate instrument for evaluating the resistance to scratching of a coated surface. The sample can be metal, wood, glass, plastic or other hard materials.

A tool is fitted with an hemispherical tip of 1mm (0.04") diameter (standard), lowered gradually on to the sample surface which is then pulled linearly 60mm (2.36").

As the sample is pulled the tool lowers automatically on to the sample, moves along the sample and gently rises up at the end of the stroke.

To ensure consistent, repeatable and reproduceable tests, the Motorised Clemen Unit automatically brings the tool gently in contact with the sample, moves across the coating and then lifts it with the automatic Start/Stop function. Depending on the load applied, varying degrees of penetration of the tool into the coating are observed - from a superficial trace to total destruction.

If the coating is completely removed during the test, the contact of the tool with the metallic substrate is indicated by a lamp and voltmeter indicator.

Elcometer offer a range of cutting tools, please see Accessories below.



STANDARDS:

AS/NZS 1580.403.1, BS 3900-E2, DIN 53799, ECCA T12, EN 13523-12, ISO 1518-1:2011, JIS K 5600-5-5

Technical Specification

Part Number	Description	Certificate
K3000M003	Elcometer 3000 Motorised Clemen Unit	○
Load Range	0 - 5kg (0 - 11lb)	
Sample Size	75 x 150mm (3 x 6")	
Sample Thickness	Standard: 0.5 - 3mm (0.02 - 0.12") Extended*: 5 - 20mm (0.2 - 0.8")	
Operating Temperature	5 to 40°C (41 to 104°F)	
Humidity Range	Not to exceed 80% relative humidity up to 31°C (88°F), decreasing linearly to 50% at 40°C (104°F).	
Dimensions	460 x 280 x 330mm (18 x 11 x 13")	
Weight	20kg (44lb)	
Packing List	Elcometer 3000 Motorised Clemen Unit, 1kg weight (x4), tungsten carbide ball tool; 1mm (0.04") mains leads (UK, EUR and US) and operating instructions.	

Accessories

Part Number	Description
KT003000P021	Tungsten Carbide Ball Tool; 1mm (0.04")
KT003000N001	Tungsten Carbide Cutting Tool; 2mm (0.08")
KT003000N015	Adjustment Kit to test from 5 to 20mm (0.02 to 0.8")
KT007210M001	Illuminated Microscope (x30)
KT003025P007	Magnifier (x10)

○ Optional Calibration Certificate available.

* Using the optional Adjustment Kit

Declaration of Conformity

The Directives covered by this declaration:

2014/30/EU Electromagnetic Compatibility
2006/42/EC Machinery Directive, as amended by 2009/127/EC and 2014/33/EU

Declares that the product(s): **Elcometer 3000 Motorised Clemen Unit**

Part Number(s): **K3000M003**

This declaration of conformity is issued under the sole responsibility of Elcometer Limited. The products identified above comply with the requirements of the above EU Directive by meeting the following standards:

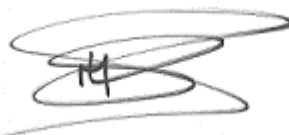
<p>EN 61326-1:2013 IEC 61326-1:2012 Class B¹, Group 1² ISM</p>	<p>Electrical equipment for measurement, control and laboratory use EMC requirements Part 1 General requirements.</p>
<p>EN 61010-1:2010 IEC 61010-1:2010</p>	<p>Safety requirements for electrical equipment for measurement, control, and laboratory use Part 1: General requirements</p>
<p>EN ISO 12100:2010 (ISO 12100:2010)</p>	<p>Safety of machinery General principles for design Risk assessment and risk reduction</p>
<p>EN 349:1993+A1:2008</p>	<p>Safety of machinery Minimum gaps to avoid crushing of parts of the human body</p>

¹ Class B product: Suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

² Group 1 ISM product: Product in which there is intentionally generated and/or used conductively coupled radio-frequency energy which is necessary for the internal functioning of the equipment itself.



Signed:



M. C. Sellars

Manchester, UK

Date: 13 July 2018

Authority: Managing Director