

Elcometer 406 Novo-Gloss™ Mini Glossmeter



Elcometer 406 Novo-Gloss™ Mini Glossmeter

Elcometer 406 Novo-Gloss™ Mini Glossmeter

Gloss is measured by directing a constant power light beam at an angle to the test surface and monitoring the reflected light. Different surfaces require different reflective angles.

Elcometer glossmeters cover the range necessary to measure any surface from high gloss to matt, providing a quantitative value to gloss measurement.

Appearance

Appearance measurement is a way of putting numbers to characteristics of surfaces that we see. The ability to independently quantify appearance allows for products to be similar whenever and wherever the product is manufactured or coated.

Elcometer provide a comprehensive range of hand held instruments to measure most of the individual characteristics that generate the overall appearance of a material or coating.

Gloss

The ability of a surface to reflect light without scattering is known as Gloss. Gloss is measured by directing a constant power light beam at an angle to the test surface and then by monitoring the amount of reflected light. Different surfaces require different reflective angles. Elcometer Glossmeters cover the range necessary to measure almost any surface from high gloss to matt, from large to small surfaces - flat or curved

Haze

Some materials appear to have considerable difference in gloss yet give comparable readings when measured with a glossmeter at one angle. These materials can be separated by measuring at a second angle and comparing the difference of the two readings. Haze is defined by ASTM D4039 as the difference between gloss at 60° and the gloss at 20°.

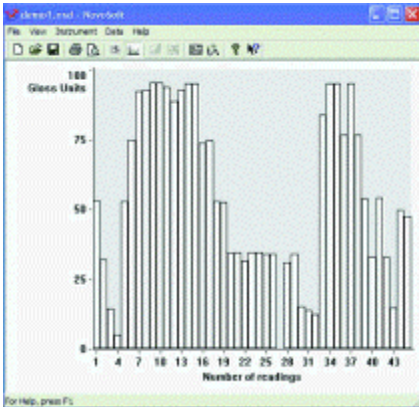
Can be used in accordance with:	
AS 1580-602.2	ASTM C 584
ASTM D 523	ASTM D 1455
BS DIN EN ISO 2813	ISO 7668
JIS Z 8741	

Increasingly, specifications and standards require a physical assessment of gloss. Gloss measurement is necessary to monitor the uniformity, compatibility, or possibly the deterioration of any protective gloss finish. The Elcometer 406 Novo-Gloss™ Mini Glossmeter is available in 60° Statistical and Dual Angle 20/60° Statistical versions.

- Low cost
- Menu driven
- Automatic calibration - Preset tile value option, for quick calibration
- Unique, calibration tile condition warning
- Gloss readings over the entire range from non-reflective surfaces to mirror finish
- Continuous measurements for variable surfaces
- Calibration possible using any standard
- Full traceability to National Standards, including BAM
- Internal calculation of max, min, mean, standard deviation and coefficient of variation
- Can be switched between English, French, German, Italian, Spanish and Dutch languages by the user

ELCOMETER NOVO-SOFT™ SOFTWARE

This purpose designed software, in Windows format, provides the user with an easy to use package for reporting purposes, archiving gloss measurements and further analysis.



- **Results page:** numerical data is displayed and may be tagged or edited.
- **Results graph:** this enables display of all results in a simple graph of reading versus gloss.
- **Statistics graph:** data is displayed as a bar chart (histogram)

Number	Value	Comment
1	51.00	
2	52.00	
3	54.00	
4	5.00	
5	53.00	
6	76.00	
7	52.40	
8	53.00	
9	56.40	
10	55.40	
11	93.00	
12	88.00	
13	93.00	
14	86.20	
15	95.20	
16	74.00	
17	74.00	
18	53.00	
19	52.40	
20	34.00	
21	24.00	
22	22.00	
23	24.00	
24	24.00	
25	34.00	
26	4.00	
27	35.00	
28	21.00	

Shade

This is the measurement of darkness or lightness of a surface. Only shading is measured, irrespective of colour, and is referred to as 'whiteness'. The test surface is illuminated at an angle of 45° and the intensity of scattered light at the perpendicular (0°), is measured on a grey scale where black is 0% and white is 100%.

Opacity

This is the degree to which a coating will obscure the surface to which it has been applied. Opacity is measured in a similar way to shade, however opacity, or hiding power, as defined by ISO 2814 involves measuring whiteness of a known film of test material on both a black (less than 5%) and a white (greater than 75%, less than 85%) substrate. A full range of opacity test charts are available – See Leneta Test Charts for further information.

Colour

The ability of a material to absorb certain wavelengths of light and reflect others. For example a black material reflects no light across the complete colour spectrum, whereas a pure white material reflects all of the light. All other colours reflect light at different points of the spectrum. Colour is quantified by the material's Red, Green and Blue (RGB) values.

Accuracy	Reproducibility ± 0.5 Gloss Units (GU)
Resolution	0.1GU
Dimensions	125 x 50 x 100 mm (4.9 x 2.0 x 3.9")
Weight	350g (12,3oz)
Power Supply	Dry Cells

Model	Description	Part Number
Elcometer 406/2	Elcometer 406 Novo-Gloss™ Mini Glossmeter - 60° Statistics	J406--60S
Elcometer 406/3	Elcometer 406 Novo-Gloss™ Mini Glossmeter - 20/60° Statistics	J406--2060S
Packing List	Elcometer 406 NOVO-GLOSS™ Glossmeter, 4 x LR6 (AA) alkaline batteries, Posi-Drive screwdriver, Certified calibration tile, Protective box for tile, Cleaning cloth for tile, Calibration certificate for tile, CD-ROM containing NOVO-SOFT™ software package, Data cable, Carrying case & Operating instructions	

Related Products



Elcometer 6014

The Elcometer 6014 Shade & Opacity Meter is a low-cost dual function reflectometer for measuring shade and opacity using 45/0° geometry.

This 2-in-1 gauge is the perfect choice for any industry that needs to measure the shade and opacity of their products.



Elcometer 401 & 402

This range of Elcometer Novo-Gloss glossmeters are available in a basic version – the Elcometer 401 – or a statistical version – the Elcometer 402 – which has a memory of up to 999 readings and can be connected to the Elcometer Novo-Soft Software for further analysis and archiving. Single, dual or triple geometry angle versions are available.



Elcometer 400

The Elcometer 400 is perhaps the only glossmeter designed specifically for measuring curved surfaces, small components and complex shapes. The continuous reading mode allows the rapid assessment of finish variation and measures a whole range of products and designs.



Elcometer 6012

Designed specifically to measure those materials which appear to have considerable difference in gloss yet give comparable readings when measured with a traditional glossmeter at one angle. Using the Elcometer haze meter, these materials can be separated by measuring at a second angle and comparing the two readings.

ENGLAND

Elcometer Instruments Ltd
Edge Lane
Manchester M43 6BU

Tel: +44 (0) 161 371 6000
Fax: +44 (0) 161 371 6010
e-mail: sales@elcometer.com
www.elcometer.com

USA

Elcometer Instruments Inc
1893 Rochester Industrial Drive
Rochester Hills Michigan 48309

Tel: +1 248 650 0500
Toll free: 800 521 0635
Fax: +1 248 650 0501
e-mail: inc@elcometer.com
www.elcometer.com

CANADA

Elcometer Canada Ltd
PO Box 622, 401 Ouelette Avenue
Windsor, Ontario N9A 6N4

Tel: +1 248 650 0500
Toll Free: 800 521 0635
Fax: +1 248 650 0501
e-mail: ca_info@elcometer.com
www.elcometer.com

ASIA & THE FAR EAST

Elcometer (Asia) Pte Ltd
896 Dunearn Rd
Sime Darby Centre #3-09
Singapore 589472,
Republic of Singapore

Tel: +65 6462 2822
Fax: +65 6462 2860
e-mail: asia@elcometer.com
www.elcometer.com

BELGIUM

Elcometer SA
Rue Vallée 13
B-4681 Hermalle /s Argenteau

Tel: +32 (0)4 379 96 10
Fax: +32 (0)4 374 06 03
e-mail: be_info@elcometer.be
www.elcometer.be

FRANCE

Elcometer SARL
97 Route de Chécý
45430 BOU

Tel: +33 (0)2 38 86 33 44
Fax: +33 (0)2 38 91 37 66
e-mail: fr_info@elcometer.fr
www.elcometer.fr

GERMANY

Elcometer Instruments GmbH
Himmlingstraße 18
D-73434 Aalen

Tel: +49 (0) 7366 91 92 83
Fax: +49 (0) 7366 91 92 86
e-mail: de_info@elcometer.de
www.elcometer.de