

Dual Angle Glossmeter

Principle:

Gloss measurement is based on the amount of light reflected on the surface relative to a polished glass reference standard, measured in Gloss Units (GU). The amount of light that is reflected on the surface is dependent on the angle of incidence and the properties of the surface.

Gloss is measured by directing a constant intensity light beam, at a fixed angle, on to the test surface and then monitoring the amount of reflected light from the same angle. This specular reflectance is measured using a glossmeter.

Different surfaces require different reflective angles. High Gloss Surfaces with a brilliant or highly polished finish reflect images clearly. This distinct reflection is caused by the incident light reflecting on the surface in a specular direction.

Semi & Matt Gloss Semi and matt surfaces reflect images less distinctly and with reduced intensity. On semi or matt surfaces light not only reflects in a specular direction but also is scattered causing the reflected image.

Current model:

The Elcometer 480 range are easy to use glossmeters which combine high accuracy, repeatability and reproducibility with functionality.



Figure: Elcometer 480

Video Link: <https://www.youtube.com/watch?v=Sc5Re-XZQXY>

Typical samples:

Paint film coatings



Instrument Description

Sub Folder: Physical Analysis



Standards:

Samples are assessed in accordance with international standards AS/NZS 1580.602.2, ASTM C584, ASTM D523, ASTM D1455, ASTM D2457, ASTM D4039, ASTM E430, ASTM E2387, BS 3900 D5, DIN 67530, ECCA T2, EN 12373-11, EN 13523-2, ISO 7668, ISO 2813, ISO 13803, JIS K 5600-4-7, JIS Z 8741.

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