Improved performance for all gloss applications

- Paints & Coatings Manufacturers and Applicators
- Polishers
- Metal Polishers
- Powder Coaters
- Plastics Manufacturers
- Inks & Printing
- Additives Manufacturers
- Automotive Industry
- Wood Coatings
- Coil Coaters
- Yacht Manufacturers
The Rhopoint IQ quantifies surface quality
issues invisible to normal glossmeters

The Rhopoint IQ is the ultimate glossmeter upgrade
IQ GLOSS measurements are fully compatible with existing Novo-Gloss and Micro-Tri-gloss results.
Dualgloss 20/60° or Trigloss 20/60/85° versions are for maximum accuracy and resolution in all gloss applications.
The Rhopoint IQ measures image quality and is the only hand held instrument that not only measures gloss but profiles how light is reflected from a surface. Standard glossmeters only measure how much light is reflected and are not sensitive to effects which dramatically reduce appearance quality.

The Rhopoint IQ measures
20/60/85° Gloss • Haze • Distinctness of image • Rspec • Goniophotometric curves

GLOSS
A measurement proportional to the amount of light reflected from a surface.
Geometry: For best results the correct measurement geometry should be chosen based on the reflectance of the material;
Matt Finish 85°, Mid Gloss 60°, High Gloss and Metallics 20°.
Measurement Unit: GU

RSPEC
The peak gloss value over a very narrow angle.
Usage – Rspec is very sensitive to small changes in texture and is used to identify subtle differences in surface smoothness.
Measurement Unit: GU

REFLECTANCE HAZE
An optical effect caused by microscopic textures or residue on a surface.
Visible Symptoms: Milky Finish apparent on surface, loss of reflected contrast, halos and patterns can be seen around reflections of high intensity light sources. High Gloss and Metallic Samples/Mirrors.
Causes: Poor dispersion, raw material incompatibility, additive migration, vehicle quality, stoving/drying/curing conditions, polishing marks, fine scratches, ageing, oxidisation, poor cleanliness/surface residue.
Measurement Unit: LogHU

Example of a coated and polished surface without and with Reflected Haze
DISTINCTNESS OF IMAGE (DOI)
A measure of how clearly a reflected image will appear in a reflective surface.

Symptoms of Poor DOI: Orange peel, brush marks, waviness or other structures visible on the surface. Reflected images are distorted.

Causes: Application problems, incorrect coating flow, coating viscosity too high/low, sag or flow of coating before curing, incorrect particle size/distribution, overspray, improper flash/recoat time, inter coat compatibility, incorrect cure times and cure temperature.

Measurement Scale: 0-100, 100 is a perfect smooth surface.

REFLECTED IMAGE QUALITY (RIQ)
Same as DOI, Reflected Image Quality (RIQ) is used to detect Orange peel effects. However, the RIQ value provides high resolution results with better correlation to the human perception of surface textures, especially on high quality surfaces such as automotive paints.

Measurement Scale: 0-100 whereas 100 represents a perfect smooth surface.

GONIOPHOTOMETRIC PROFILE
The instrument displays surface reflectance profiles 17-23°. The shape of the curve describes how the light has interacted with the surface.

Sharp curves close to the specular direction indicate smooth highly reflective surfaces.

Different textures and distortions produce identifiably shaped profiles depending on their size and frequency. Full goniophotometric information can be downloaded to PC for further analysis and comparison, without the need for interface software.

Best in class accuracy and traceability
- ISO 17025 calibration certificate
- Advanced standard verification system guarantees error free calibration.
Specifications | Rhopoint IQ 20/60° and Rhopoint IQ 20/60/85°

GLOSS MEASUREMENT SPECIFICATION
Measuring Angle 20° | Improved accuracy and resolution on high gloss & metallic samples (>70 GU when measured at 60°)
Measuring Angle 60° | Universal angle – all gloss levels
Measuring Angle 85° | Improved Resolution for Matt Finishes (<10 GU when measured at 60°) (only for Rhopoint IQ 20/60/85°)
Measurement range | 20°: 0-2000 GU / 60°: 0-1000 GU / 85°: 0-199 GU
Resolution | 0.1 GU
Standards | ISO 2813, ASTM D523, ASTM D2457, DIN 67530, JIS 8741 (Conforms 60° & 85° / Verified Performance 20°)

GLOSS CALIBRATION STANDARD
Traceability | ISO 17025 Certified Laboratory, BAM Traceable
Uncertainty | 0.4 GU

HAZE MEASUREMENT SPECIFICATION
Near Specular Reflectance | Measured at 17-19°, 21-23°; Switchable between Haze Units (HU) and Log Haze Units (LogHU)
Resolution | 0.1 HU
Repeatability | 0.2 HU
Reproducibility | 1.5 HU
Standards | ASTM E430, ISO 13803

RIQ MEASUREMENT SPECIFICATION
Measurement Range | 0-100
Resolution | 0.1
Repeatability | 0.2
Reproducibility | 0.5
Standards | ISO 2813, ASTM D523, ASTM D2457, DIN 67530, JIS 8741 (Conforms 60° & 85° / Verified Performance 20°)

RSPEC MEASUREMENT SPECIFICATION
Peak Specular Reflectance | 20° +/- 0.1°
Measurement Range | 0-2000 GU

DOI MEASUREMENT SPECIFICATION
Measurement range | 0-100
Resolution | 0.1
Repeatability | 0.2
Reproducibility | 0.5
Standards | ASTM D5767

GONIOPHOTOMETRIC SPECIFICATION
Measurement range | 12.75-27.25°, reported 14-26°
Angular Resolution | Approx. 0.02832°
Resolution | 0.1 GU

INSTRUMENT SPECIFICATIONS
Colour Screen | High resolution illuminated colour display; Brightness adjustable
Construction | All aluminium construction – enclosure, optics, calibration holder; magnetic calibration holder with in position detector
Statistical Analysis | Max, Min, Mean, S.D.; all measured parameters
Graphical Analysis | On board trend analysis; Gloss and IQ Values
Power | Rechargeable Lithium Ion; >17 Hours operation; >20,000 Readings/Charge
Operate from | Internal Battery/USB/Mains Charger
Recharge Time | USB 4.5 Hrs; Mains Charger 2.5 Hrs
Data Memory | 8 MB –> 999 Readings; User definable batching
Data Transfer | Bluetooth; PC & MAC compatible; USB Connection
Dimensions & Weight | 65 x 140 x 50mm (H x W x D); 790g
Interface Languages | English, German, French, Spanish, Italian, Chinese, Japanese

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