

micro-gloss 60° robotic

Automatic online gloss control

A stable running process is the key for uniform and consistent quality. Therefore, gloss needs to be measured on a routine basis in the production process and the measurement results need to be documented for clear communication.

The new micro-gloss robotic allows automatic appearance control. With the robust fixture it can be integrated into measuring systems like a xy-table. Thus, measurements are taken always on the same sample area, which ensures repeatable positioning and reliable results.



Stable process means consistent quality

Automated gloss control allows measuring a high number of parts and provides complete and representative data for statistical process control - 100 % checking becomes reality.

The calibration tile is supplied in a special track which enables fast and automatic calibration on a regular basis - accuracy at any time.



micro-gloss 60° S robotic

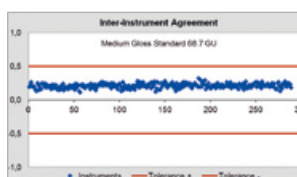
A matte finish is not only a new design trend, but also can be a challenge for product harmony. In order to guarantee a uniform look among the various components of a product, very tight tolerances are specified.

Only test equipment with excellent precision will be able to objectively control production. The new micro-gloss 60° S robotic offers improved performance for 60° gloss in the critical low gloss range (0-20 GU). This excellent accuracy can be guaranteed due to our patented calibration procedure during the production of the gloss meters.



Technical Specifications

| | 0 - 20 GU | 20 - 100 GU | 100 - 2000 GU |
|--------------------------|-----------|-------------|---------------|
| Measurement range | | | |
| Repeatability | ± 0.1 GU | ± 0.2 GU | ± 0.2 % |
| Reproducibility | ± 0.2 GU | ± 0.5 GU | ± 0.5 % |



In compliance with:

Standards

| | |
|-------------|---------------|
| ISO | 2813, 7668 |
| ASTM | D 523, D 2457 |
| DIN | 67530 |
| JIS | Z 8741 |

Ordering Information

| Cat. No. | Description |
|-------------|---------------------------|
| 4560 | micro-gloss 20° |
| 4561 | micro-gloss 60° |
| 4562 | micro-gloss 85° |
| 4563 | micro-TRI-gloss |
| 4564 | micro-TRI-gloss μ |
| 4565 | micro-gloss 60° S |
| 4566 | micro-TRI-gloss S |
| 4567 | micro-gloss 45° |
| 4568 | micro-gloss 75° |
| 4569 | micro-gloss 60° XS |
| 4570 | micro-gloss 60° XS-S |
| 4573 | micro-gloss 60° robotic |
| 4576 | micro-gloss 60° S robotic |

Comes complete with:

Glossmeter
 Holder with integrated calibration tile
 Traceable certificate
 USB-cable, Battery
 Operating manual
 Carrying case
 Software for download:
 smart-lab Gloss or smart-process Gloss with 2 licenses

Note: After software download both software packages can be used for 30 days free trial. Thereafter, the user needs to decide and register for one software package.

System Requirements:

Operating system: Windows® 7 SP1, 8.1 or 10
 Microsoft® .NET Framework 4.5.2
 Hardware: Core 2 Duo, 2.5 GHz, i7 recommended or equivalent
 Memory: 4 GB RAM, 8 GB recommended
 Hard-disc capacity: 2 GB during installation
 Monitor resolution: 1280 x 1024 pixel or higher
 Interface: free USB-port

Technical Specifications

| Geometry | Application | Measuring Area |
|--------------------------------------|---|---------------------------|
| 20° | high gloss | 10 x 10 mm (0.4 x 0.4 in) |
| 60° | semi gloss | 9 x 15 mm (0.35 x 0.6 in) |
| 85° | low gloss | 5 x 38 mm (0.2 x 1.5 in) |
| 20°, 60°, 85° | universal | see single angle |
| 20°, 60°, 85° | universal | see single angle |
| 60° | semi gloss | 9 x 15 mm (0.35 x 0.6 in) |
| 20°, 60°, 85° | universal | see single angle |
| 45° | Ceramic, Plastic, Film | 9 x 13 mm (0.35 x 0.5 in) |
| 75° | Paper, Vinyl Siding | 7 x 24 mm (0.3 x 0.95 in) |
| 60° | semi gloss | 2 x 4 mm (0.08 x 0.16 in) |
| 60° | semi gloss | 2 x 4 mm (0.08 x 0.16 in) |
| 60° | semi gloss | 9 x 15 mm (0.35 x 0.6 in) |
| 60° | semi gloss | 9 x 15 mm (0.35 x 0.6 in) |
| Measurement range¹ | 0 - 100 GU | 100 - 2000 GU |
| Repeatability² | ± 0.2 GU | ± 0.2 % |
| Reproducibility² | ± 0.5 GU | ± 0.5 % |
| Spectral sensitivity | CIE standard observer for illuminant CIE-C | |
| Measuring time | 0.5 seconds / geometry | |
| Thickness: | | |
| Substrate | Fe: magnetic, NFe: non-magnetic | |
| Measurement Range | 0 - 500 μ m (0 - 20 mils) | |
| Accuracy | ± (1.5 μ m +2% of measured value) | |
| Memory | 999 readings with date and time | |
| Interface | USB | |
| Power supply | one 1.5V AA Alkaline Battery 4,000 readings or via USB-port | |
| Dimensions | 155 x 73 x 48 mm (6.1 x 2.9 x 1.9 in) | |
| Weight | 0.4 kg (0.9 lbs) | |
| Operating temperature | 15 - 40 °C (60 - 104 °F) | |
| Relative humidity | up to 85 %, non-condensing | |

¹ for 45° and 75° glossmeters see previous pages

² for S-Type glossmeters see previous page

Ordering Information

| Cat. No. | Description |
|-------------|------------------------------|
| 4405 | USB-Cable micro-gloss family |
| 4866 | Software smart-lab Gloss |
| 4867 | Software smart-process Gloss |

Note: smart-chart license fee for more than two installations is quantity dependent. Please contact your local BYK-Gardner representative.

Accessories

| | |
|--|---|
| For data transfer from the glossmeter to a PC, USB-A | |
| Software for professional analysis and documentation in the laboratory | |
| Process QC Software for analysis of multi-component products | |
| Export / Import | Standards (.xml format) Organizer (.xml format) |
| Languages | English, German, French, Italian, Spanish, Chinese, Japanese |