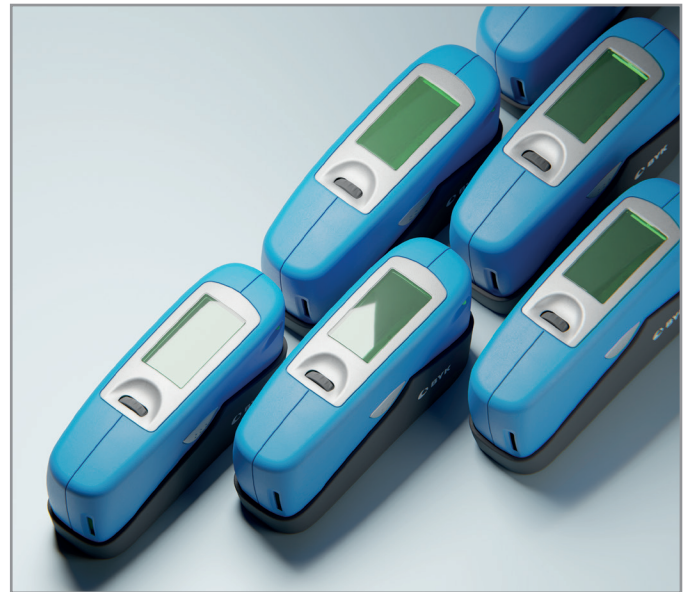


micro-gloss

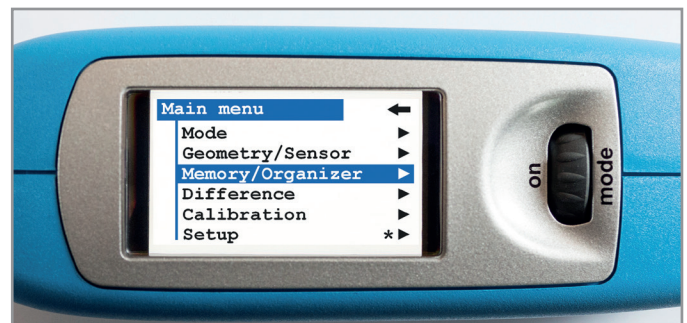
Intelligent gloss measurement with smart communication

The micro-gloss has been the unsurpassed industry standard in gloss measurement for many years. It is the only glossmeter combining the highest accuracy, ease-of-use and multiple functionality – essential for today's testing requirements. In addition, the smart-chart software is the ideal tool for smart communication with professional documentation and efficient data analysis.



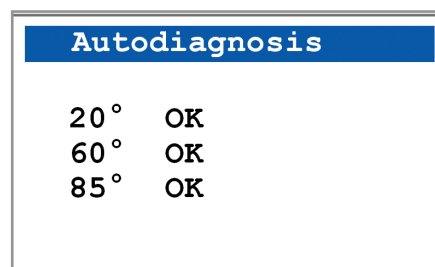
Brilliant color display: easy to read – easy to use

Ergonomics and easy handling were the main focus for the design. The micro-gloss is not too large and not too small – it feels just right in your hand. The scroll wheel operation and new color display with an easy-to-navigate menu make gloss measurement easier than ever before.



Auto diagnosis: Standard OK – Calibration OK

Accurate readings require reliable calibration. The gloss meter and calibration holder make a perfect couple – the calibration standard is always protected in the holder of the micro-gloss. The intelligent auto diagnosis of the gloss meter is a unique feature which guarantees long-term calibration stability and tells you when to calibrate. It even checks whether the standard is clean. Operator friendly. Safe.



Gloss of paint or metal – from matte to mirror gloss

With the micro-gloss gloss meter you can measure any material – paints, plastics or brightened metals. Its expanded range measures from very matte to mirror like reflection of up to 2000 gloss units, automatically and without additional calibration. Always reliable results – according to international standards.



Smart functions for any task

Different tasks require different tools. The easy to turn scroll wheel of the glossmeter quickly shows you all needed functions - even without a PC:

The **Basic mode** is your tool to quickly check the gloss of a few samples.

The **Statistic mode** not only shows the average, but all statistical data needed to judge whether the measured difference is significant or how uniform the surface gloss is on your sample. You define what you want to see: mean, standard deviation, range, min/max...

The **Difference mode** allows you to define a reference with Pass/Fail limits and will compare all of the following measurements to the selected reference. The Pass/ Fail indication is colorfully shown on the high resolution display – ideal for production control.

The **Continuous mode** is the most efficient way to quickly check the uniformity of a large sample surface. You define the measurement interval and are now ready to continuously measure the gloss by sliding the micro-gloss over the surface. When finished, the average with min – max range are displayed.

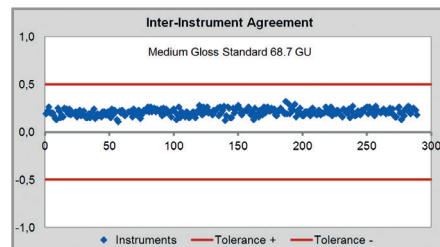
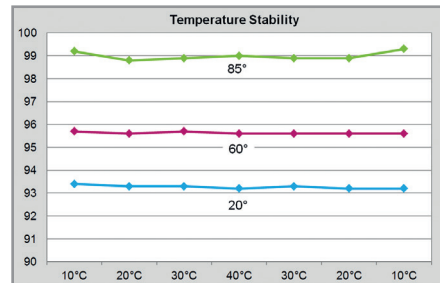
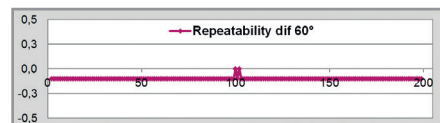
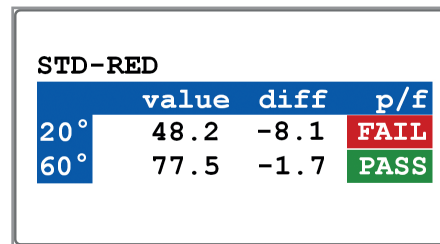
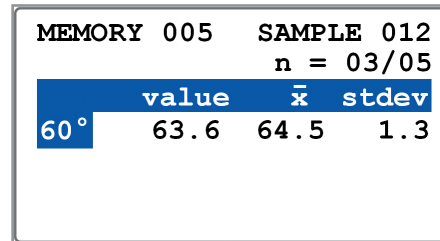
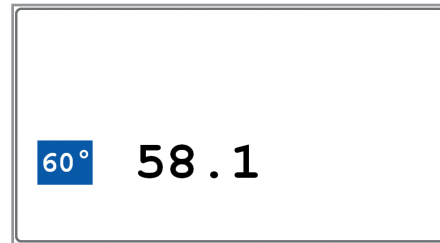
Technical Performance: Unsurpassed in the industry

No matter how harsh your production conditions are or how tight your limits may be, accuracy and reliability of the micro-gloss are proven by thousands of users to guarantee always the highest quality.

The long-term stable LED light source of the glossmeter provides not only highly repeatable results for many years, but also will never burn out. A 10 year warranty on the lamp life is guaranteed.

Due to advanced temperature control, the micro-gloss assures the highest stability of the gloss readings - if you are in the lab or move to a "hot spot" on the line.

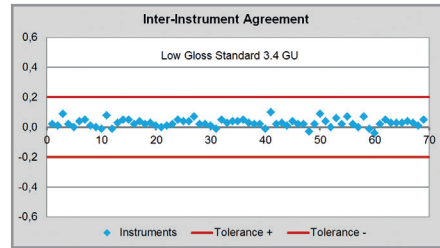
Our patented calibration procedure during the production of the glossmeters enables an excellent inter-instrument agreement. No matter how far your customer may be away, if he is one of the thousands of micro-gloss users, he will read the same values as you.



Improved Performance for low gloss finishes (60°) – micro-gloss S-Family

A matte finish is not only a new design trend but also can be a must for applications where low or no reflection is essential – such as car interior. Often, a variety of materials, from leather to plastics, is used and needs to be harmonized. Additionally, surface structures vary from large grains to fine stipples, usually with very low gloss. In order to guarantee a uniform look among the various parts, very tight tolerances are specified.

Only testing instruments with excellent precision will be able to objectively control production. The new micro-gloss S family 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 glossmeters.



micro-gloss XS: Small port for small parts

Today, many products not only consist of different parts, but are composed of parts with similar surface appearance. An appealing design is important for the success of products like smart phones, computers or home electronics. Often small parts are integrated in a large part or connect parts such as frames, buttons or decorative trim pieces. Their size and design make it difficult to evaluate with a classical gloss meter.

The micro-gloss XS is a 60° gloss meter with a small measuring area of 2x4 mm, an ideal solution to measure small parts and assure that they fit with the large components.

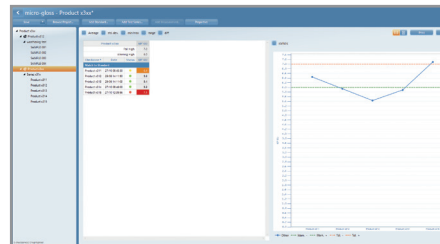


smart-chart – data analysis software

Whatever the task, smart-chart will do it for you. From simple data tables of single test series to trend reports over time – anything is possible.

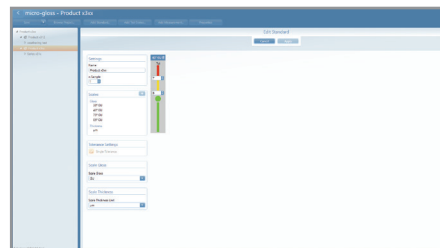
smart-lab for ONLINE measurement and memory transfer:

- Data analysis with tables and line graphs
- Data is organized in projects with easy to share xml files



smart-process for a STANDARDIZED QC:

- Sampling process with predefined measurement procedures in Organizers
- Comprehensive data analysis with easy filtering and statistical analysis



Standards

ASTM D523
ASTM D2457
ISO 2813
ISO 7668
DIN 67530
JIS Z 8741



Catalog Number	4560	4561	4569	4562	4565	4570
Short Description	micro-gloss 20°	micro-gloss 60°	micro-gloss 60° XS	micro-gloss 85°	micro-gloss 60° S	micro-gloss 60°XS-S
Geometry	20°	60°		85°	60°	
Application	high gloss	semi gloss		low gloss	low to semi gloss	
Measuring Area	10 x 10 mm	9 x 15 mm	2 x 4 mm	5 x 38 mm	9 x 15 mm	2 x 4 mm
	0.4 x 0.4 in	0.35 x 0.6 in	0.08 x 0.16 in	0.2 x 1.5 in	0.35 x 0.6 in	0.08 x 0.16 in
Repeatability Gloss 0-20	0.2 GU				0.1 GU	
Repeatability Gloss 20-100	0.2 GU					
Repeatability Gloss 100-2000	0.20%					
Reproducibility Gloss 0-20	0.5 GU				0.2 GU	
Reproducibility Gloss 20-100	0.5 GU					
Reproducibility Gloss 100-2000	0.50%					
Spectral sensitivity	CIE standard observer for illuminant CIE-C					
Measuring time	0.5 seconds / geometry					
Memory	999 readings with date and time					
Languages	DE, EN, ES, FR, IT, PL, PT, RU, TR, ZH					
Interface	USB					
Power supply	one 1.5V AA Alkaline Battery, or via USB-port					
Battery Capacity	4,000 readings					
Dimensions: L x W x H	15.5 x 4.8 x 7.3 cm					
	6.1 x 1.9 x 2.9 in					
Weight	0.4 kg					
	0.9 lb					
Operating temperature	15 - 40 °C					
	60 - 104 °F					
Relative humidity	up to 85 %, non-condensing					

Delivery Content

Glossmeter, Calibration holder, USB-cable micro-gloss (4405), Software with 2 licenses for download: smart-lab Gloss (4866) or smart-process Gloss (4867), Battery, Traceable certificate, Manual, Carrying case

System Requirements

Operating system: Windows® 10 1607 or later
Hardware: i5 2.5 GHz; i9 recommended, or equivalent (x86 & x64 architecture only)
Memory: 16 GB RAM, 32 GB recommended
Free hard-disk capacity: 4 GB during installation
Monitor resolution: 1920 x 1080 pixel; 4K recommended
Interface: free USB-port

Catalog Number	Short Description	Delivery Content
4441	Calibration Holder 20°	
4443	Calibration Holder 60°	
4559	Calibration Holder 60° XS	
4445	Calibration Holder 85°	
4422	Checking Standard micro-gloss 20°	Checking standards in aluminum guide High gloss standard Semi gloss standard for 20°
4462	Checking Standard micro-gloss 60°	Checking standards in aluminum guide High gloss standard Semi gloss standard for 60°
4464	Checking Standard micro-gloss 60° S	Checking standards in aluminum guide High gloss standard Semi gloss standard for 60°, approx. 5 GU
4490	Checking Standard micro-gloss 60° XS	Checking standards in aluminum guide High gloss standard Semi gloss standard for 60°
4487	Checking Standard micro-gloss 85°	Checking standards in aluminum guide High gloss standard Semi gloss standard for 85°
4866	smart-lab Gloss	2 licensees for download www.byk.com
4867	smart-process Gloss	Software with 2 licenses for Download
4405	USB-Cable micro-gloss	