**The new Sheen Tri-Glossmaster has been designed with the user in mind.**

Now offering greater versatility, ease of use, and far superior data handling capabilities than ever before.

With three angles and a new high-resolution colour display in one robust, lightweight, portable package the Tri-Glossmaster easily tackles most gloss measurement applications.

- Simple to operate - selection of operating parameters controlled by an in-built scroll wheel

- High-resolution colour display

- Intelligent auto diagnosis indicates when calibration is required and condition of the standard

- Easy to calibrate - at the press of a button the instrument is calibrated and ready for use

- Lightweight and portable

- Expanded measurement range now to 2000 Gloss Units allowing measurement of mirror gloss as standard

- Software - powerful downloadable smart-chart software gives you professional QC reports.
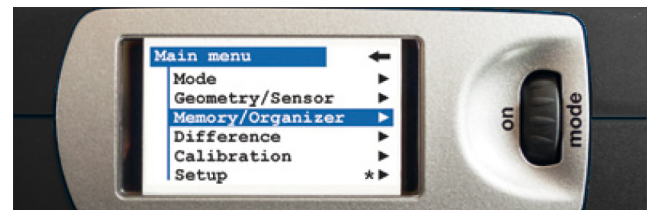
Three angles in one instrument; easy to calibrate – easy to use

With the versatility of three geometries the Tri-Glossmaster allows any quality variations to be recognised quickly and effectively.

All measurements are made at the same location on the sample no matter which measurement geometry or geometries are selected. The results are displayed instantly – including Difference, Pass / Fail and Statistics. Samples can be measured separately at each angle or at 2 or 3 angles simultaneously and effectively processed using the powerful built-in software.

Auto diagnosis

The new auto diagnosis feature ensures that the instrument is always correctly calibrated ready for use. It is now so intelligent that it will tell you if the calibration tile is dirty!

The unique design of the calibration tile holder not only ensures that calibration is performed accurately each time but also prevents damage to the tile when not in use. It also prevents any dirt or small objects from entering the measuring orifice of the instrument, when not in use, which could affect its operation.
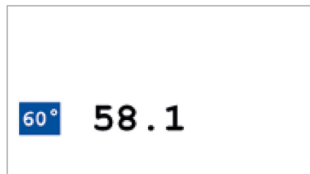
Expanded measurement range – now to 2000 gloss units

With the Glossmaster range 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.
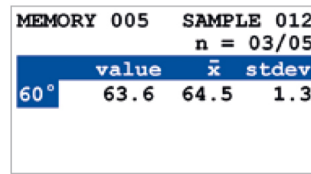
Four modes for flexibility

Different tasks require different tools. The scroll wheel quickly shows you all the functions.

Basic mode

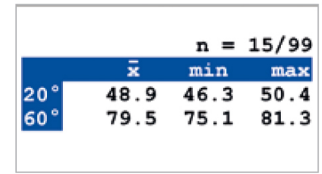| MEMORY 005		SAMPLE 012
		n = 03/05
	value	x̄	stdev
60°	63.6	64.5	1.3

Statistic mode

STD-RED			
	value	diff	p/f
20°	48.2	-8.1	FAIL
60°	77.5	-1.7	PASS

Difference mode

		n = 15/99
	x̄	min	max
20°	48.9	46.3	50.4
60°	79.5	75.1	81.3
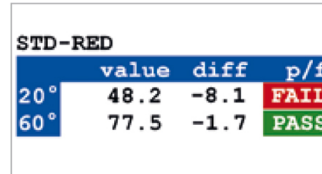
Continuous mode

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

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.

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.

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.

Data storage, software and analysis

Data can be stored in the large capacity memory or processed on the powerful downloadable smart-chart software.

smart-lab Gloss

- Measure your products offline or online and transfer the results to smart-lab Gloss. Immediately, you will get a professional QC-report, including data table and graph.

- Setup your product specifications in the Standard Management module, with Pass - Warning - Fail limits for display in your QC-reports.

- Manage your lab work in projects to show production process stability using trend reports.
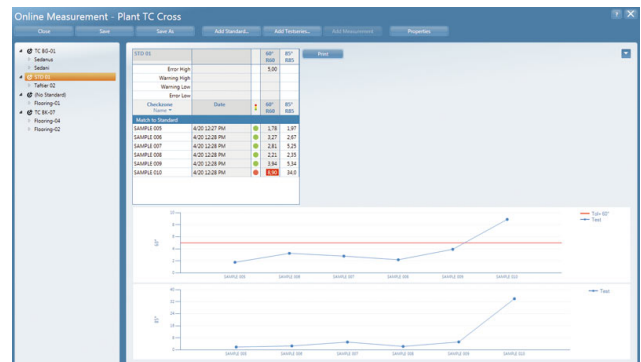
smart-process Gloss

- Ideal for products with multiple measurement locations.

- Setup Organizers for menu guided test sequences and clear sample identification.

- Efficient QC analysis for process control with a high sampling rate. The data are saved in a SQL database, which allows handling of large data sets over a long time period.

- Flexible data analysis based on defined identification parameters for a certain time range. Monitor your process stability with scorecards, trend reports and SPC charts (box plot).
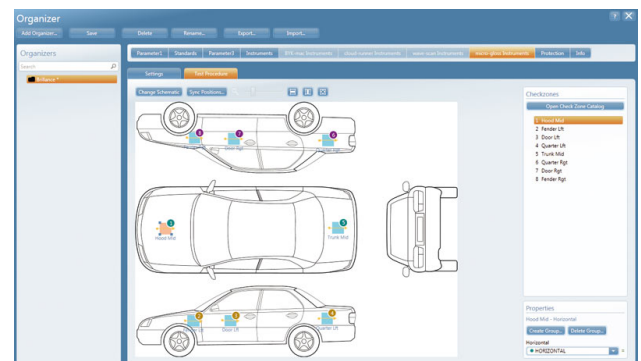
Maintenance and calibration

The Tri-Glossmaster is designed for minimum maintenance. It is only necessary to replace the battery when exhausted and ensure the calibration tile is kept clean. We do recommend that the instrument be returned for re-calibration annually.

International standards

Specification	Tri-Glossmaster 20	Tri-Glossmaster 60	Tri-Glossmaster 85
DIN EN ISO 2813	✓	✓	✓
ASTM D 523	✓	✓	✓
ASTM D2457	✓	✓	✓
DIN 67530	✓	✓	✓
JIS Z 8741	✓	✓	✓
EN ISO 7668	✓	✓	✓

Complete kit includes

Instrument and calibration holder (certified), smart-lab Gloss or smart-process Gloss software for download, USB-cable, battery, operating manual and case.

Technical specification

Specification	Tri-Glossmaster 20º		Tri-Glossmaster 60º		Tri-Glossmaster 85º	
Measurement area	10 x 10 mm (0.4 x 04. in.)		9 x 15 mm (0.35 x 0.6 in.)		5 x 38 mm (0.2 x 1.5 in)	
Measurement range	0-2000 GU		0-1000 GU		0-160 GU	
Measurement time	0.5 Seconds / Geometry		0.5 Seconds / Geometry		0.5 Seconds / Geometry	
Repeatability	0-99.9 GU	0.2 GU	0-99.9 GU	0.2 GU	0.2 GU	0.2 GU
	100-2000 GU	0.2%	100-2000 GU	0.2%	100-2000 GU	0.2%
Reproducibility	0-99.9 GU	0.5 GU	0-99.9 GU	0.5 GU	0-99.9 GU	0.5 GU
	100-2000 GU	0.5%	100-2000 GU	0.5%	100-2000 GU	0.5%
Memory	999 measurements with date/time. Memory for 50 references in difference mode with limits					
Display	High-resolution colour display					
Height H x L x W mm (in)	73 (2.9) x 155 (6.1) x 48 (1.9)					
Weight	400gm (0.9lbs)					
Measurement modes	Sample, Statistics, Continuous, Difference, Basic					
Interface	USB only (no Bluetooth®)					
Battery performance	Approx. 4000 measurements with a 1.5 V AA alkaline battery					
Power	1 x 1.5 V AA mignon alkaline battery or via USB					
Auto shut-off time	Selectable 10-99 seconds					
Languages	English, Spanish, German, French, Italian, Japanese, Chinese					
Operating temperature	15-40ºC (60-104ºF)					
Storage environment	-10-60°C (14-140ºF)					
Relative humidity	Up to 85%, non condensing					
System requirements	Operating system: Windows® 7 SP1 or 8.1 Microsoft®.NET Framework 4 Hardware: Core 2 Duo, 2.2 GHz, i7 recommended or equivalent Memory: 4 GB RAM, 8 GB recommended Hard-disc capacity: min. 300 MB Monitor resolution: 1280 x 1024 pixel or higher Interface: free USB-port					

Ordering information

Product Ref	Description
SH260C	Tri-Glossmaster 20°/60°/85° Multi-angle Glossmeter with colour display
	Optional accessories
SHBG4434	Linearity check standard Tri-angle (certified), High gloss and 3 semi gloss tiles 20, 60, and 85°.
SHBG4433	Linearity check standard Tri-angle mirror (certified) High gloss and 3 semi gloss tiles 20, 60, and 85°. Highly reflective.
SHBG4422	Linearity check standard 20°, high and semi-gloss tile (certified)
SHBG4462	Linearity check standard 60°, high and semi-gloss tile (certified)
SHBG4487	Linearity check standard 85°, high and semi-gloss tile (certified)

Dimensions of checking standards above are 170 x 103 x 17 mm. Additional angles in these dimensions are available also additional standards in 100 x 100 mm glass tiles are available on request.