

## Gloss and thickness measurement in one portable instrument

The new Tri-Glossmaster  $\mu$  combines gloss and thickness measurement in one easy to use instrument.

Simultaneous measurement of both parameters is made at the same position on the sample.

### Features

- Combined display of gloss at 20°, 60° or 85° and thickness measurement.
- Dual function probe - Ferrous / Non Ferrous to measure thickness on both aluminium or steel substrates.
- Intelligent auto detection of substrate.
- Simultaneous calibration of gloss and thickness using detachable holder.
- Glossmeter functions identical to that of the standard Tri-Glossmaster.

The Tri-Glossmaster range now offer greater versatility, ease of use and far superior data handling capabilities than ever before. With three angles in one robust, lightweight, portable package the range will easily tackle most gloss measurement applications.

- Simple to operate - selection of operating parameters controlled by an in-built scroll wheel.
- Clear visible LCD menu driven 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.
- Direct data transfer from instrument to Excel.



### Auto diagnosis – pure perfection!

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.

**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.**

## Appearance: Gloss: Tri-Glossmaster $\mu$ (SH260T)



### Three angles in one instrument. Easy to calibrate – easy to use.

With the versatility of three geometries the new 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.

### Data storage and analysis – four modes for flexibility

With today's continuing demands for Statistical Process Control the Glossmaster range offers the ultimate in data handling.



**Basic mode** – for a single measurement of gloss at the selected geometry – the basic mode gives a quick snapshot of information which is displayed on screen.

**Continuous mode** – similar to Basic but allows measurements to be taken at any selected geometry or geometries continuously allowing the checking of the uniformity of gloss over a surface, the results are displayed on screen. The frequency at which measurements are taken can be adjusted between 0-9 seconds.

**Statistics mode** – readings are displayed in 3 selectable columns allowing complete bespoke configuration, each column can display one item of statistical information – Actual value, Average, Std, Dev, Min, Max, Range, Difference or Pass/Fail. The results can then be downloaded to an Excel spreadsheet.



**Sample mode** – allows measurements to be taken and referenced to a standard value assigned by the user. On screen information indicates differences between the sample and the standard.

### Expanded measurement range - now to 2000 gloss units

A standard feature of the new Glossmaster is its expanded measuring range allowing mirror gloss measurements to be made without the need for another instrument. This is ideal for applications where measurements are required of highly polished metals and mirrors.



## Appearance: Gloss: **Tri-Glossmaster $\mu$ (SH260T)**

### Technical specification

Specification	Glossmaster 20°	Glossmaster 60°	Glossmaster 85°
Measurement area	10 x 10 mm (0.4 x 0.4 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    100-200 GU	0.2 GU    0.2%
	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%
Auto shut-off time	Selectable 10-99 seconds	Selectable 10-99 seconds	Selectable 10-99 seconds
Memory	999 readings with date and time with recall function. Memory for 50 references in difference mode with limits	999 readings with date and time with recall function. Memory for 50 references in difference mode with limits	999 readings with date and time with recall function. Memory for 50 references in difference mode with limits
Interface	RS232, data transfer software included	RS232, data transfer software included	RS232, data transfer software included
Height	73 mm (2.9in.)	73 mm (2.9in.)	73 mm (2.9in.)
Length	155 mm (6.1in.)	155 mm (6.1in.)	155 mm (6.1in.)
Width	48 mm (1.9in.)	48 mm (1.9in.)	48 mm (1.9in.)
Weight	400 gm (0.9lbs)	400 gm (0.9lbs)	400 gm (0.9lbs)
Power	One 1.5V Mignon Alkaline battery – 10000 readings or optional external power supply	One 1.5V Mignon Alkaline battery – 10000 readings or optional external power supply	One 1.5V Mignon Alkaline battery – 10000 readings or optional external power supply
Languages	English, Spanish, German, French, Italian, Japanese	English, Spanish, German, French, Italian, Japanese	English, Spanish, German, French, Italian, Japanese
Operating temperature	15-40°C (60-104°F)	15-40°C (60-104°F)	15-40°C (60-104°F)
Relative humidity	Up to 85%, non condensing	Up to 85%, non condensing	Up to 85%, non condensing

Thickness specification	
Substrate	Fe                    Magnetic
	NFe                    Non magnetic
Measurement range	0 – 1000 $\mu$ m (0-40 mil)
Repeatability	$\pm$ 2%
Basis tolerance	$\pm$ 1.5 mm (0.05 mil)
Standards	ASTM B499, ASTM D1400 DIN EN ISO 2360, EN ISO 2178

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## International standards

Standard	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	✓	✓	✓

## Standard supply

Tri-Glossmaster, holder with integrated calibration tile, data transfer software, PC cable, operating manual, battery, carrying case.

## Maintenance and calibration

The Glossmaster range of glossmeters are designed for minimum maintenance by the user. It is only necessary to replace the battery when exhausted and ensure the calibration tile is kept clean. However we do recommend that the instrument be returned for re-calibration annually.

## Ordering information

Product ref.	Description
SH260T	<b>Tri-Glossmaster <math>\mu</math></b> Measure 3 angles simultaneously, also equipped with a built-in thickness gauge
	<b>Other Tri-Glossmaster products</b>
SH260C	<b>Tri-Glossmaster 20°/60°/85°</b> Measure 3 angles simultaneously with one instrument. Includes colour display (See separate datasheet)
	<b>Accessories</b>
SHBG4401	USB Adapter, including driver software
SHBG4403	External power supply, 90-264V, self adapting, European plug
SHBG4404	External power supply, 90-264V, self adapting, UK plug
SHBG4422	Linearity check standard 20°, high & semi-gloss tile (certified)
SHBG4462	Linearity check standard 60°, high & semi-gloss tile (certified)
SHBG4487	Linearity check standard 85°, high & semi-gloss tile (certified)

Owing to continuous development, we reserve the right to introduce improvements and modify specifications without prior notice.

**Our sales team can be contacted on:  
info@sheeninstruments.com or +44 (0)208 783 4321**