

color-guide

Color Measurement for Specific Applications

Color Control of Small Parts

Keyboards, pens and window handles require a color instrument with a very small aperture and a repeatable sample placement. color-guide 45/0, 4 mm aperture together with the optional sample holder guarantee repeatable results and a convenient sample placement.

- Minimum sample size: 5 x 5 mm (0.2 x 0.2 in)

Color Control of Powdered Material

When measuring powdery or granular material like raw material pucks or grainy food, the instrument's optics must be protected. The color-guide spectrophotometer with glass sealed aperture uses a colorless, optical glass and can directly measure such products, thus saving sample preparation time.

Color Control – easy and secure

- Easy to use and handle – even for color beginners
- Stable, long-term calibration – needed only every three months
- Highly temperature stable – even in extreme conditions
- Uses standard AA batteries – good for 10,000 readings
- 10 year warranty on light source – no lamp changes needed
- Light weight and small size – only weighs 500 g

Professional Documentation with easy-link

ISO 9000 requires documentation of color data. easy-link, included with the color-guide, offers all of the necessary tools:

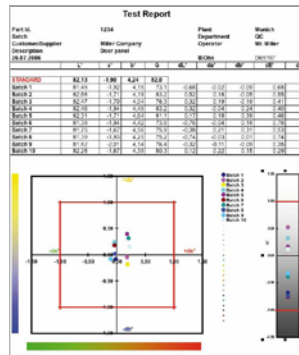
- Easy and direct data transfer from the instrument to Excel®
- Predefined QC-report templates (Lab-plot, trend graph) are included
- All relevant quality data can be easily summarized in one report: Color – Gloss – Film Thickness
- Easy management of your standards: standard back-up and establishing of production tolerances



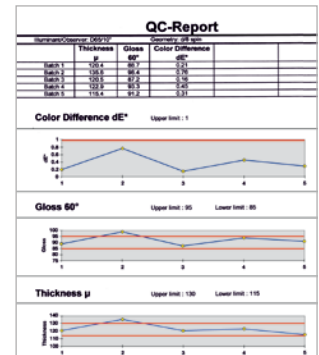
color-guide 45/0, 4 mm



color-guide with glass sealed aperture



Complete color QC-report



Trend analysis:
Color – Gloss – Film Thickness



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color-guide Training

BYK-Gardner offers you more than just an instrument. We assist you in analyzing your color readings, understanding how to set tolerances and as a result be able to use the color-guide spectrophotometer to save time and money and at the same time improve your quality. Therefore, the instrument comes with a half day training course including:

1. Color Theory

- The building blocks of color: illuminant, observer, object
- Color differences with interpretation

Ordering Information

Cat. No.	Description
CC-6807	color-guide 45/0
CC-6692	color-guide 45/0
SE-6800	Extended Warranty one year additional

Comes complete with:

Spectrophotometer
 Black calibration standard
 White calibration standard with certificate
 Green checking reference
 Sample area locator
 Software easy-link
 Interface cable
 USB-adapter
 4 x AA batteries
 Hand strap; Carrying case
 Operating instructions; Color theory folder
 Training

Free 1x preventive maintenance service during warranty period

Standards

ASTM	D 2244, E 308, E 1164
DIN	5033, 5036, 6174
ISO	7724

2. Operation and Software Training

- Measure samples and standards by single and average readings
- Save, recall and delete measurements
- Change illuminants, observers, color scales
- Direct data transfer to Excel®

Technical Specifications

	Geometry	Aperture
	45/0	4 mm
	45/0	20 mm, glass sealed
Spectral Range	400 – 700 nm, 20 nm resolution	
Repeatability¹	0.01 ΔE^* (10 readings on white tile)	
Reproducibility¹	0.2 ΔE^* (average on 12 BCRA II tiles)	
Color Systems	CIE Lab/Ch; Lab(h); XYZ; Yxy	
Color Differences	ΔE^* ; $\Delta E(h)$; ΔE_{FMC2} ; ΔE_{94} ; ΔE_{CMC} ; ΔE_{99} ; ΔE_{2000}	
Indices	YIE313; YID1925; WIE313; CIE; Berger; Color strength; Opacity; Metamerism	
Illuminants	A; C; D50; D55; D65; D75; F2; F6; F7; F8; F10; F11; UL30	
Observer	2°; 10°	
Memory	200 Standards, 999 Samples	
Languages	English; German; French; Italian; Spanish; Japanese	
Power Supply	4 AA alkaline; NiCd or MH batteries	
Operating Temperature	10 – 42 °C (50 – 110 °F)	
Humidity	< 85% relative humidity, non-condensing / 35 °C (95 °F)	
Dimensions	9.5 x 8 x 18 cm (3.7 x 3.2 x 7 in)	
Weight	0.5 kg (1.1 lbs)	

¹ Standard deviation

Sample Holder for Small Parts

The mask of the holder is custom made for the 4 or 11 mm aperture of the color-guide. The sample is placed in a jig, ensuring measurement at the same spot. The holder is supplied with three different jigs to guarantee maximum flexibility: a flexible foam disk for quick checks, a finished disk with cylindrical groove, and a blank disk to be customized by the user.

Ordering Information

Cat. No.	Description
CC-6825	Sample Holder 4 mm, size: 60 x 20 mm (2.40 x 0.80 in)
CC-6845	Sample Holder 11 mm, size: 60 x 20 mm (2.40 x 0.80 in)
CC-6826	Replacement foam disk
CC-6827	Replacement disk, cylindrical groove
CC-6828	Replacement blank disk



LABEQUIP

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Accessories

Replacement and Checking Standards

The spectro-guide and color-guide spectrophotometers come complete with white and black calibration standards, as well as a green reference standard. The green reference standard should be used periodically to audit instrument performance and the condition of the calibration tiles.

As the spectro-guide also performs a gloss reading, it is additionally recommended to periodically use a medium gloss checking standard to control the gloss readings.



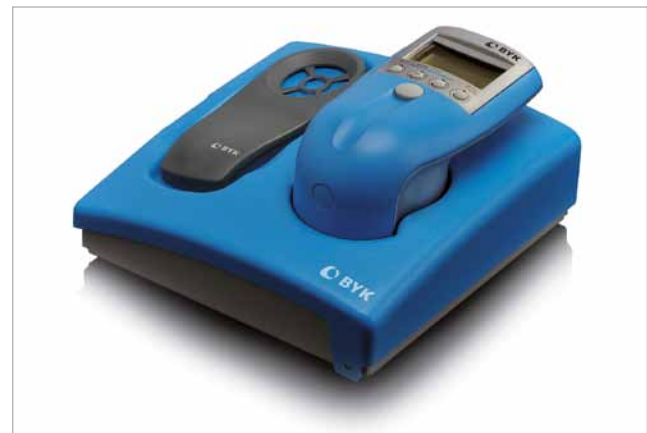
Ordering Information

Cat. No.	Description
CC-6810	Black Standard for color-guide
CD-6840	Black Standard for spectro-guide
CC-6844	Checking Standard 60° Gloss
CC-6846	Checking Standard 60° Gloss S

Note: Please contact your local service department for replacement of white and green standard.

Ordering Information

Cat. No.	Description
CC-6814	Sample Area Locator 4 mm
CC-6815	Sample Area Locator 11 mm
CC-6816	Sample Area Locator 20 mm
AG-4545	BYKWARE easy-link
CC-6819	Interface Cable
AG-4401	USB-adaptor (for connection to USB-interface, incl. driver software)
CC-6813	Special USB-adaptor (for data transfer to auto-QC <i>lite</i> software)
CC-6818	Protective Stand (to hold instrument and store accessories)
CS-6532	BYKWARE auto-QC <i>lite</i>



auto-QC *lite* Software

For advanced color analysis, the universal Windows® based color control software auto-QC *lite* can be used:

- User defineable screen layouts and print-outs
- Pass/Fail analysis with auto-tolerancing
- Exports of color data to Excel® within a second

Info! For more information see pages 87 – 89.



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