

BYK-mac i

Total color impression of effect finishes

The appearance of effect finishes is influenced by different viewing angles and viewing conditions. Apart from a light-dark flop and color shift special sparkling effects can be created. The BYK-mac i spectrophotometer is unique as it measures both multi-angle color and flake characterization in one portable device.

- Traditional 5-angle color measurement: 15° / 25° / 45° / 75° / 110°
- Additional color measurement behind the gloss for color travel of interference pigments: -15°
- Sparkle and graininess measurement for flake characterization

Ergonomic design and easy operation

The shape of the instrument is designed to ensure easy handling and true portability. Due to its intuitive menu quality control of metallic finishes has never been easier.

- Menu guided operation according to your own sampling procedure
- Designated buttons for standard and sample readings
- Scroll wheel to select menu functions
- Large color display – easy-to-read inside and outside
- Storage of up to 1000 readings in selectable memories
- smart-chart software for professional analysis, documentation and data management



Hood	D65/10° 3/3				
-15°	ΔL_p	Δa_p	Δb_p	ΔE_{pD}	
15°	0.05	0.11	-0.03	0.12	
25°	0.05	0.08	-0.06	0.11	
25°	-0.14	0.05	-0.11	0.19	
45°	-0.22	0.02	0.13	0.26	
75°	-0.13	0.15	0.32	0.38	
110°	0.12	0.18	0.34	0.40	
			ΔEt	0.27	

Hood	D65/10° 2/2		
ΔSE	ΔEt	ΔSt	
0.23	0.11	0.21	
pass			

Reliable readings at any time

In order to guarantee stable positioning, the BYK-mac i is equipped with trigger pins on the bottom plate of the instrument. If the pins do not have contact with the surface, an error message will be displayed. This ensures reproducible results on test panels as well as curved parts ($r > 500$ mm).

Additionally, the surface temperature is measured and saved with each measurement.

Accurate results and low maintenance

The BYK-mac i spectrophotometer uses a light source with long-term stability and patented illumination control which provides superior accuracy and low maintenance for many years.

- Stable, long-term calibration – needed only every three months
- Temperature independent measurement results between 10 - 40 °C – without calibration
- Excellent agreement between instruments allowing usage of digital standards among the supply chain
- 10 year warranty on the light source – no lamp changes needed



Always ready

The instrument is operated with a rechargeable battery pack (Li-Ion). The docking station automatically charges the battery pack in the instrument as well as a spare pack located in the docking station.

Optionally the instrument can be operated with 4 standard mignon alkaline or rechargeable batteries.

The docking station also transfers measured data to a PC.

Quantification of Fluorescent Light

The BYK-mac i spectrophotometer is equipped with additional sensors to detect fluorescent light excited in the visible range. The Intensity Emission value quantifies the fluorescent light and can be used as a preliminary indicator for light fastness.



Info!

For more information on visual evaluation of effect finishes see *byko-spectra effect*.