cloud-runner

Control and guarantee a uniform finish - no more mottling!

Mottling disturbes the overall color harmony of effect finishes. These irregular lightness variations can now be objectively measured with BYK-Gardner's newest innovation: the cloud-runner simulates visual evaluation under different observing angles and characterizes clouds / mottles by their size and visibility.

Objective and reliable values for QC and trouble shooting

- Small to large mottles are measured under three observing angles
- Scan length can be varied from 10 to 100 cm
- Objective measurement results independent of color and curvature

Ideal tool for the production line

- Small and light weight easy to handle
- For flat and curved areas, radius > 50 cm
- Easy, menu guided operation via scroll wheel and large, multilingual display
- Full statistics with ability to save in selectable memories
- Large memory for 1000 readings
- USB port for data transfer to PC
- smart-chart software:
 - Organizer files for sample id
 - Data management with SQL Database
 - Standard QC Report



select mode ...





and measure







Always ready

The mottle meter is operated with a rechargeable battery pack (Li-Ion). The docking station automatically charges the battery pack and transfers the measured data to the PC.



Ordering Information

Cat. No.	Description
6350	cloud-runner

Comes complete with:

Mottling meter with protective cover Reference tile with certificate smart-chart software on CD Docking station with USB-cable 2 rechargeable Li-lon battery packs Operating manual Carrying case Training

Extended Warranty: see pages about Technical Service

Free 1x preventive maintenance service during warranty period

System requirements:

Operating system: Windows® XP SP3, Vista SP2

or Windows 7 SP1

Microsoft® .NET Framework 4

Excel® version 32-bit: 2003, 2007 or 2010, incl. VBA Hardware: Core 2 Duo, 2.2 GHz, or equivalent

Memory: 2 GB RAM

Hard-disk space: min. 100 MB

Monitor resolution: 1280 x 1024 pixel or higher

Disk drive: CD-ROM or DVD drive Interface: freee USB port

Technical Specifications

Technical Specific	ations
Cloud Size	
Md	6 to 13mm
Me	11 to 24 mm
Mf	19 to 42 mm
Mg	33 to 72 mm
Mh	57 to 126 mm
Mi	100 to 200 mm
Repeatability ¹	5% or > 0.5
Reproducibility ¹	8% or > 0.8
Object Curvature	radius > 500 mm
Scan Length	10 to 100 cm, selectable in 1cm steps
Resolution	25 points/cm
Measuring Time	< 4 sec.
Memory	1000 readings
Interface	USB port
Languages	English, French, German, Italian, Japanese,
	Portuguese, Spanish
Light Source	White Power LED
Dimensions	150 x 110 x 55 mm (5.9 x 4.3 x 2.2 in.)
Weight	650 g (1.5 lbs)
Power Supply	rechargeable battery pack, approx. 1500 readings
Temperature Range	operation: +10°C to 40°C (+50°F to 104°F)
	storage: 0°C to 60°C (+32°F to 140°F)
Rel. Humidity	up to 85% at 35°C (95°F), non-condensing

¹Standard deviation

Training for cloud-runner

BYK-Gardner offers you more than just an instrument. We assist you in operating the cloud-runner system and understanding your mottle readings. As a result you will be able to use the mottling meter to save time and money and at the same time improve your quality. Therefore, the instrument comes with a one day training course including:

1. Mottling Theory

- Visual perception and instrumental measurement of Mottling / Cloudiness
- Data interpretation: How can the readings be used to optimize process and material parameters

2. Operation and Software Training

- Set-up of an "Organizer" to create a routine measurement procedure
- Programming of the instrument with "organizer" and measurement of several samples
- Direct data transfer to Excel for documentation of individual readings
- Data transfer to smart-chart software and saving in a database for routine QC
- Data analysis

The training can be performed in one day or two half days. It is recommended to split the training into two half days:

- Day 1: Theory and basic operation (set-up organizer, taking readings and saving data in a database)
- Day 2: 3-4 weeks later to ensure readings were taken and saved in a database. Data analysis and standard QC reports can be explained using customer specific data.

Ordering Information

Reference Tile cloud-runner	
Docking Station cloud-runner	
6349 Battery Pack cloud-runner	
4831 Software smart-chart	



Accessories

To check performance of the mottling meter, with certificate
Incl. USB interface cable and recharger 100 – 240 V self adapting
Rechargeable battery for automatic charge in docking station
Software for professional analysis and documentation of color and appearance



Please refer to section Preventive Maintenance.