

cloud-runner

Control and guarantee a uniform finish – no more mottling!

Mottling disturbs 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

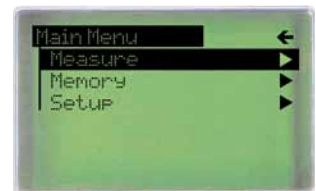
- Small to large mottles are measured under three observing angles
- Scan length can be varied from 10 to 100 cm
- Objective measurement results independent of color and curvature

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
- auto-chart software:
 - Organizer files for sample id
 - Data management with Access DB
 - Standard QC Report in Excel®



select mode ...



and measure

A screenshot of the device's LCD display showing measurement results for 'Hood Mid' with n=2/3. The table lists values for three observing angles: 15°, 45°, and 60°. Each angle has three columns of data: Md, Me, and Mf. There is also a checkbox and a symbol at the bottom.

	Md	Me	Mf
15°	5.3	3.7	4.1
45°	7.0	5.7	4.6
60°	5.2	4.4	3.4



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
AM-6350	cloud-runner
SE-6350	Extended Warranty – one year additional

Comes complete with:

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

Free 1x preventive maintenance service during warranty period

Hardware Requirements:

Operating system: Windows® 2000 or higher
 Excel® version: 2002 or higher, incl. VBA
 Memory: min. 256 MB RAM (recommended 512 MB)
 Hard-disk space: min. 100 MB
 Monitor resolution: XGA (1024 x 768) or higher
 Disk drive: CD-ROM or DVD
 Interface: USB port

Technical Specifications

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
Repeatability¹	5% or > 0.5
Reproducibility¹	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 1.1
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 auto-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

Cat. No.	Description
AM-6353	Reference Tile
AM-6351	Docking Station
AM-6349	Battery Pack
AW-4809	auto-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 analysis and professional documentation in Excel®



Certified For Certification Services and Preventive Maintenance see pages 268 – 270.