

Automatic
Colour Analysis

QCX® ACM150 AUTOMATIC COLOUR ANALYSIS ARRANGEMENT

The ACM150® arrangement provides colour analysis of powder samples pressed in the steel ring. For colour measurement the Konica Minolta CR-400 Chroma Meter instrument is used. The arrangement is suitable for application in automated laboratories.

The ACM150® offers an easy, high-performance tool for colour measurement with quality control software used to establish and maintain colour quality standards in the building materials industry. These solutions enable users to accurately assess and

control the quality of raw materials and finished products in production and verify that products meet required standards such as Light Reflectance Value.

Colour measurement will allow producers to offer customers a consistent product with a higher perceived quality and, therefore, value. The device is a good tool for checking parameters in cement production.

ADVANTAGES

- **Produce consistent quality:** production consistency improves end user satisfaction
- **Improved capacity:** automated analysis means your laboratory can perform at a higher capacity and your workers are free to attend to more meaningful and complex tasks.
- **Automation compatibility:** it can be connected to automatic sample processing systems for seamless integration into a fully automatic laboratory.

EASY COLOUR MEASUREMENT OF POWDER SAMPLES

How it works

The steel ring with pellet is inserted into the ring nest. The light sensor detects it and the pneumatic cylinder lifts the ring up to the colour meter measuring head. After measurement the ring with pellet is returned to the initial position where can be extracted. The data from the colour measurement is send to control system.

For color measurement the Konica Minolta CR-400 Chroma Meter instrument is used. It accurately identifies color characteristics in objects.

Possible configuration

QCX systems

The Automated Colour meter can be integrated into any robotic lab, but is best used with QCX systems, including QCX automatic samplers, transport systems and sample processing.



Specification

Sample material	Powder sample pressed into Pellet in steel ring
Ring size	ø51.5/35 x 8.6 mm, ø40/32 x 14 mm, ø40/35 x 14 mm
Communication interface	Ethernet RJ45
Power supply 1	100 / 240 V AC; 50 / 60 Hz; 20 W
Power supply 2	24 V DC; 10 W
Compressed air supply	0.6 – 1.0 MPa (Quality 1.4.1 as per ISO 8573-1)
Operating conditions	Temperature: 5 to 35°C Humidity: 20 – 85 %, no condensation
Weight	Approx. 28 kg
Dimensions (W x D x H)	393 x 394 x 1,158 mm
CR-400	
Illumination / Viewing system	d/0° (diffuse illumination/0° viewing angle; specular component included)
Display range	Y: 0.01% to 160.00% (reflectance)
Measurement time	1 sec.
Measurement / Illumination area	Ø 8 mm / Ø 11 mm
Repeatability	Within ΔE*ab 0.07 standard deviation (when the white calibration plate is measured 30 times at intervals of 10 seconds)