



ColorXRA 45 Pulp

Measure Pulp Color and Brightness

In paper production, color and OBA information is first available at the pulp stage. While the readings are not the same as on finished paper, a color shift in the pulp is an indication that there will be a color shift in the wet paper and final product. The ColorXRA 45 Pulp is a compact, 45:0 inline spectrophotometer to measure color, whiteness, and brightness in thick pulp.

Identifies Color Shifts During the Pulp Stage for Early Corrections

The ColorXRA 45 Pulp spectrophotometer is mounted in a stainless steel housing and measures inline, directly into the thick pulp (concentration of 3% to 5%) through a bypass system. This device can measure color, whiteness, and optical brightness to identify shifts before they impact the final product. With a broad spectral range from 330 nm to 730 nm with a 1 nm resolution, this device delivers excellent color data for both visible and UV spectrums.

Reduces Raw Material and Dye Usage

When blending two lines of raw material, such as dark and light, to a constant level, color and brightness can shift. The ColorXRA 45 Pulp monitors this during production to control the addition of waste and visualize the homogeneity of the pulp after each dye addition to ensure optimum dye consumption without significantly changing the color of the total pulp for increased product quality.

Enables Objective Pass/Fail Decisions

The ColorXRA 45 Pulp delivers excellent short-term stability due to its use of real dual beam measurement, and its automatic wavelength calibration ensures exceptional measurement accuracy and long-term stability. It is a must-have color measurement instrument to make objective color assessment for pulp manufacturing and is the ideal complement to ESWin QC software, the ColorXRA 45 Lab, and the ColorXRA 45 Inline for a complete measurement system for paper machines.

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Geometry	45° : 0°
IIA - DE* avg (SCI)	<0,3
Repeatability RMS DE*	0.01
Wavelength Range	330-730nm
Wavelength Resolution	1nm
Pyrometer to Measure Sample Temperature	yes
Dirt Detection	yes
400nm Cutoff	yes
Reflectance Apertures Std.	10mm
Distance Aperture - Sample	10mm
UV Calibration	yes
Communications	USB
Ethernet Interface via ECXV2 to PC	yes
Internal Wavelength Calibration	yes
Air Purging To keep the unit clean and cool	yes
Working Temperature	max 60°C, with cooling max. 80°C
Dimensions	170 x 110 x 295 mm ³
Measurement Time	1/500 s
Measurement Frequency	3 s
Lighting Source Xenon flash lamp is close to daylight, tungsten lamps have low radiation in the blue area. Continuous illumination is warming up the instrument this results in measurement drift.	2 Xenon flash lamps, one with UV cut filter, the other adjusted to D65
D65 UV calibration Necessary if ODB shall be measured correctly	optional
Online Backgrounds For opacity measurement and external calibration/measurements	2 (white and black)

Service Support & Warranty

Drawing on our extensive experience in the world of color, X-Rite Pantone offers the right level of services, onsite and online, to support and nurture your business. Call on us for standard color services and training, or work with us to tailor training and services to your specific needs. We help you get color right the first time, right every time. For more information about extended support options, visit www.xrite.com/extended-warranties-services.