

DWR

DYNAMIC WATER RETENTION ANALYZER



SIMPLE AND FAST MEASUREMENT

POSSIBLE TO MEASURE THE
INFLUENCE OF COATING COLORS
AS WELL AS BASE PAPERS ON
WATER RETENTION

BEST CORRELATION TO ACTUAL
PROCESS CONDITIONS

- Possible to measure characteristics of coating colors as well as influences of different base papers on water retention.
- Traditional static analyzers always have a risk for pigment cake formation or starch retrogradation, which prevent the flow of coating color to the base paper. There are pressure and shear forces in DWR during the measurement without a risk of blocking.
- Due to the dynamic flow DWR has an excellent correlation to actual coating processes.
- Measurement cycle with weighing is about three minutes.
- DWR has an automated cleaning cycle.



MEASURING TIME 5 SECONDS: Base paper is weighed, and then a paper sample is placed together with a filter on the lid of the DWR. The lid is closed. In order to simulate the application, pressure (1–2 bar) and measurement time (usually 3–6 s) can be selected on the touch screen.

SAMPLE	(g/m ²)
Color A	26,1
Color B	22,8
Base paper 1	26,1
Base paper 2	32,5

DYNAMIC WATER RETENTION RESULTS

Coating color flows under pressure, and the instrument makes measurement automatically. After each measurement the lid is opened and the base paper sample is weighed.

SPECIFICATIONS



APPLICATION DATA

Pressure range	0,5 - 2,0 bar
Measuring time	200 ms - 60 s
Filter type	0,4 µm HTTP
Diameter of measuring filter	47 mm
Diameter of measuring area	41 mm
Sample amount	300 ml or more

DIMENSIONS AND SPECIFICATIONS

Width	330 mm
Height	280 mm
Length	530 mm
Weight	12 kg
Operational temperature	Room temperature

CONNECTIONS

Pneumatic air	4 - 8 bar min. 20 l/min
Water	1 - 4 bar
Power	110-240 VAC 50-60 Hz

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