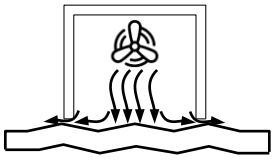
MRP - Messen Regeln Prüfen Automatisierungstechnik

Description



MRP-ST LAB PPS 2015 - roughness measurement according to the Parker-Printsurf method for MRP-Schnettler test line

Laboratory roughness measurement

There are three common test methods for determining the roughness or smoothness of paper: *Bekk*, *Bendtsen* and *Parker Print Surf (PPS)* smoothness. MRP and Schnettler recommend the roughness measurement according to Parker Print Surf for smooth graphic papers intended for high-quality printing.

Indicator / Characteristics

The roughness measurement according to Parker Print Surf in the automatic test line is characterized by the following features:

- contacting measurement
- good repeatability
- Reference samples are included

Physical principle

The applied measuring principle is called air flow measurement. Here, a measuring head is pressed against the paper and the amount of air that escapes at a defined pressure is a measure of the quality of the paper surface. The results of each measurement are converted into µm.
The lower the measured value, the more even or smooth is the surface.

The measuring instrument has a selectable contact pressure of 0.1 - 5.0 MPa.

Recorded measured values and statistics

- PPS roughness value (mean value)
- Standard deviation, as desired as 1S, 2S, 3S
- Coefficient of variation
- Maximum and minimum values of the measurement series

Available standards

- Tappi T555
- ISO 8791-4

For rougher paper surfaces, we recommend evaluation with a measuring instrument according to Bendtsen.

Measurement accuracy

Type	MRP-ST LAB PPS 2015
Measuring range	0,60 - 6,00 µm
Test pressure	19.6 kPa
Resolution	0,005 µm
accuracy - 2 sigma at 1 sec	±0.02 µm
Operating temperature	10°C-50°C

MRP Automation Technology GmbH
Otto-Lilienthal-Str. 2
D-56751 Polch

Phone: +49(0)2654 88091-0
Fax: +49(0)2651 88091-299
e-mail: info@mrp-at.de
Internet:: www.mrp-at.de

Schnettler Technologies
Wilhelm-Ruppert-Str. 38

D-51147 Cologne

Phone: +49 (0) 2203 9618948
Mobile: +49 (0) 179/7643074

e-mail: info@schnettler-technologies.de
Internet: www. schnettler-technologies.de