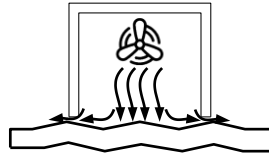


MRP - Messen Regeln Prüfen Automatisierungstechnik

Description



MRP-ST LAB BEN 2015 - Roughness measurement using the Bendtsen method for MRP-Schnettler automatic 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)*. MRP and Schnettler recommend the Bendtsen roughness measurement for uncoated paper or for medium-smooth surfaces.

Indicator / Characteristics

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

- one-sided, contact 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 given in ml/min at differential pressure.

As lower the measured value, as more even or smoother the surface is.

Messgenauigkeiten

Type	MRP-ST LAB BEN 2015
Measuring range	50 - 3500 ml/min
Test pressure	1,47 kPa
Resolution	0,5 ml/min
Accuracy - 2 sigma at 1 sec	0,4% aber nicht besser als ± 1 ml/min
Operating temperature	10°C-50°C

The measuring instrument has a selectable contact pressure.

Recorded measured values and statistics

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

Available norms

- DIN 53108
- ISO 8791-2

For smooth paper surfaces, we recommend evaluation with a Parker-Print-Surf measuring instrument.

MRP Automatisierungstechnik GmbH
Otto-Lilienthal-Str. 2
D-56751 Polch

Schnettler Technologies
Wilhelm-Ruppert-Str. 38

D-51147 Köln

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

Telefon: +49 (0) 2203 9618948
Mobil: +49 (0) 179/7643074

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