

KHS LABEL TEST CENTER

Testing laboratory for materials in the labeling process





TESTING OF LABEL MATERIALS IN THE LABEL TEST CENTER

- Testing of the materials of all roll-fed and paper labels
- Quality classification of label materials
- Specific setting of labeling parameters based on the determined key indicators
- Fast solution to material-related customer problems
- Development of new measurement methods adapted to the needs of the industry

FILM TESTING

MODULUS OF ELASTICITY (TENSILE MODULUS)

Incident: label stretching

Key indicator: determination of the tensile modulus as a measure of the stiffness of a label



COEFFICIENT OF SLIDING FRICTION

Incident: high frictional resistance

Key indicator: the coefficient of sliding friction is a measure of the frictional force in relation to the contact pressure between two

bodies. It describes the dynamic friction from the drum to the label during the labeling process



FINAT TAPE TEST

Incident: color abrasion

Key indicator: the ink anchoring is assessed base on the proportion of the printing ink

that is removed when an adhesive tape is pulled off



SURFACE TENSION

Incident: poor adhesion of the hotmelt glue

Key indicator: the surface tension can be viewed as a relative measure for assessing the probable adhesion of an adhesive layer



FURTHER MEASUREMENTS

Measurement of thickness, dimensional accuracy and electrostatic charge

PAPER TESTING

COBB₆₀

Incident: delayed glue drying

Key indicator: test of the water absorption capacity of the front and back of paper labels



DIRECTION OF FIBERS

Incident: labels curl off the bottle

Key indicator: the correct direction of the fiber is important. The direction of the fiber

of the label is the same as the processing direction of the paper machine



EMCO: DPM 66

Incident: measurement of the paper quality

Key indicator: determination of the quality

of the paper in interaction with liquids



ABRASION RESISTANCE (ABRASION TEST)

Incident: color abrasion

Key indicator: test of the resistance of the paper labels and their pressure to mechanical abrasion



FURTHER MEASUREMENTS

Measurement of the thickness, determination of the grammage, penetration of lye, breaking load and bending stiffness

SAMPLING OF SAMPLE LABELS

Film labels

Scope of sampling: approx. 1/5 of the label reel. Secure the end of the label web with an adhesive strip.

Paper labels

Scope of sampling: approx. 200 paper labels.

General information

- Fingerprints, grease and dirt influence the measurement results and should be avoided
- Do not kink the labels!
- Laboratory samples should be suitably packed to protect them from external influences

IMPORTANT INFORMATION WHEN HANDING OVER THE LABELS FOR TESTING

- Date and location
- Observed incident for the specific selection of measurement methods

The samples are conditioned in the laboratory at a temperature of 23°C and 50% humidity for at least 48 hours before measurement.

CONTACT

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