

## Dimension Stability System **DSS**

# Module **HSA** Heat Shrinkage Analyzer

Measuring Instrument for the Investigation  
of the Dimension Stability  
of Paper/Board/OPP films under Thermal load



Prediction of the converting properties of paper/board/OPP foils concerning the dimension stability at thermal load up to 230°C.

### Main Applications

- Runnability of laser printing and copy paper for professional applications
- Register accuracy:
  - | four color laser printing / offset printing
  - | rotogravure printing, decor printing
- Waviness at web offset
- Staple problems at professional copier, laser printer and offset printing machines

### Special applications

- Pre-impregnates
- OPP films
- Wall papers
- Special filter paper

### Measuring results

- Shrinkage-time-diagram
- Shrinkage at a time point t

### Main User

- Producer of paper, board, foils
- Producer of printer, copy machines, printing machines

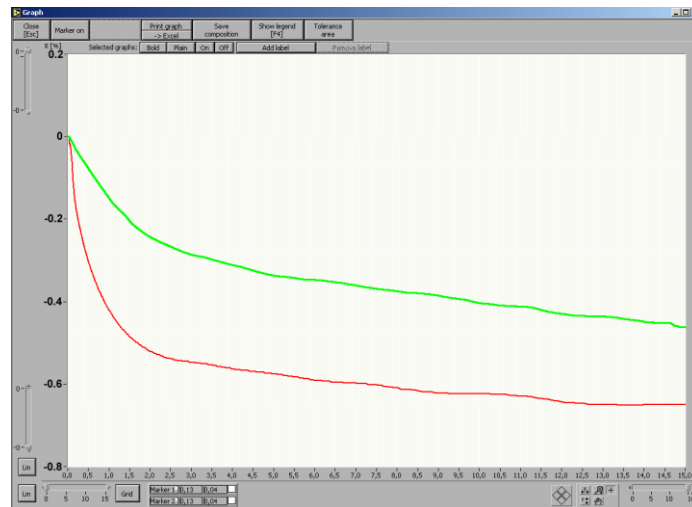
## Features

- **Change in dimension in MD and CD can be measured separately**
- Measuring results:  
**Dimension-Time-Diagram**  
**Change in dimension at a selectable time point**
- Measuring range:  
**Stretching up to approx. 27%**  
**Shrinkage up to approx. 5%**
- High accuracy
- **Temperature adjustment** via PC software
- Measuring temperature:  
**from ambient temperature up to max. 230°C**
- Includes **measurement of paper moistness, humidity and ambient temperature**
- Efficient and user-friendly software
- Export of the measuring data into MS EXCEL by a single mouse click
- Easy to handle
- Compact and robust construction
- Low vulnerability to failures

### Example:

*Shrinkage of two different LWC papers with 50% relative moistness at a temperature of 130°C*

Goal:  
Characterization of the tendency of waviness with offset printing



## Technical data

Range of temperature: from ambient temperature up to 230°C  
 Sample dimension: 60mmx200mm (MD/CD)  
 Resolution: 0.013%  
 Accuracy: +/- 0.05% abs. +/- 5%rel.  
 Power supply: 24V DC / 230V, 50Hz / 115V, 60Hz,  
 100VAC – 240VAC, 50-60Hz  
 Dimensions: 295 x 280 x 320 mm (HxWxD)  
 Weight: approx. 15 kg