

## Print simulation tester

- Simulates different press types for flexography, offset and rotogravure
- Determine "missing dots" without the use of an ink
- Measures the dynamic compression of a sheet at relevant nip conditions
- Offers detailed surface information
- Fast QC test that runs in a couple of seconds
- No operator training required



### What is a "relevant surface smoothness" test?

When printing in rotogravure, offset and flexography, print areas without sufficient contact will result in "missing dots" appearing as white areas or colour changes. In contrast to air leak methods, the PST instrument offers detailed information across the entire test area. Furthermore, these test results are obtained at the relevant nip load and contact time, which is not possible with optical, non-contacting methods.

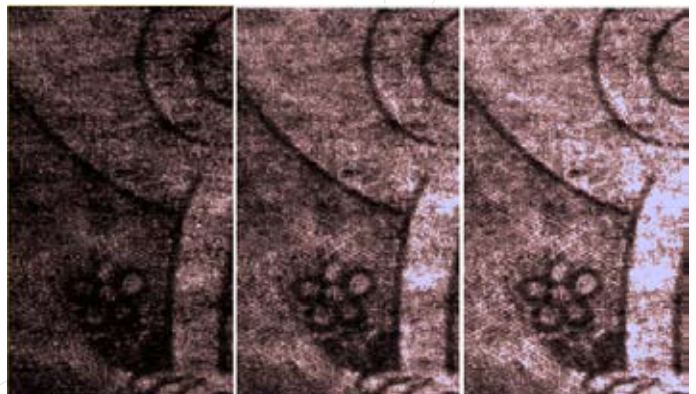
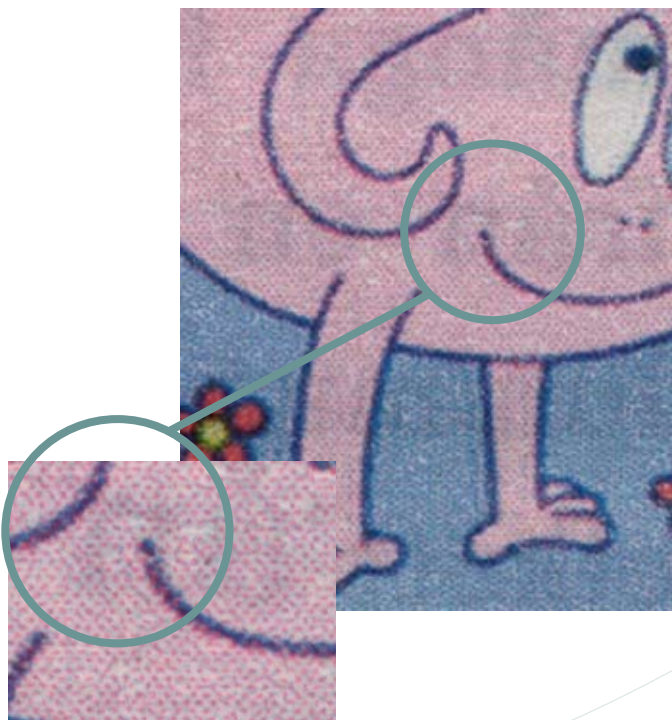
Until now established methods to determine the surface topography all fail to provide relevant data as current methods are not carried out under the relevant conditions occurring inside a printing nip. The innovative PST instrument simulates a range of different press types, nip loads and web speeds and it eliminates the influence from a printing ink, as no ink is being used.

### Mode of operation

The operator selects the printing press parameters for nip load and nip time and loads a specimen into the instrument. The specimen is then automatically clamped against a flat, transparent glass block and one or more images are captured during the selected nip time.

Captured images are then analysed to determine the dynamic compressibility of the specimen surface and the risk of "missing dots" appearing in a printing press of the selected type. The front of this leaflet shows an example of "missing dots" on a printed newsprint grade. The PST instrument determines these missing dots without the use of a printing ink.

Below is an image sequence showing how the contact area changes as a function of nip load and contact time.



## Technical specifications

This instrument is delivered with an integrated computer module\*

### Signal interface

USB, LAN 10/100, COM-port

### Test cycle time

< 5 seconds

### Field of View

12 x 16 mm

### Resolution

10 µm per pixel

### Specimen size

min. 25 x 25 mm

### Nip Load

1 – 10 MPa (10-100 kp/cm<sup>2</sup>)

### Minimum Nip Time

one millisecond

### Air supply

8 bar ( 110 psi)

### Power supply

100-240 VAC, 200 W

Specifications are subject to changes without further notice

\*no display screen, no keyboard included in shipment

## Physical specifications

### Dimensions (H x W x D)

490 x 190 x 320 mm

### Shipping Dimensions

58 x 46 x 48 cm ( 0.13 m<sup>3</sup>)

### Weight (Net/Gross)

26 /35 kgs