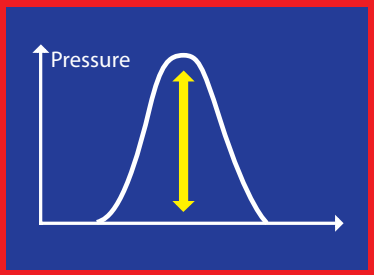
Offset & Rotogravure

2nd Generation!

Range 20–999 N/cm²
Resolution 1 N/cm²

Pressure Indicator™

Nip pressure in Newton/cm²



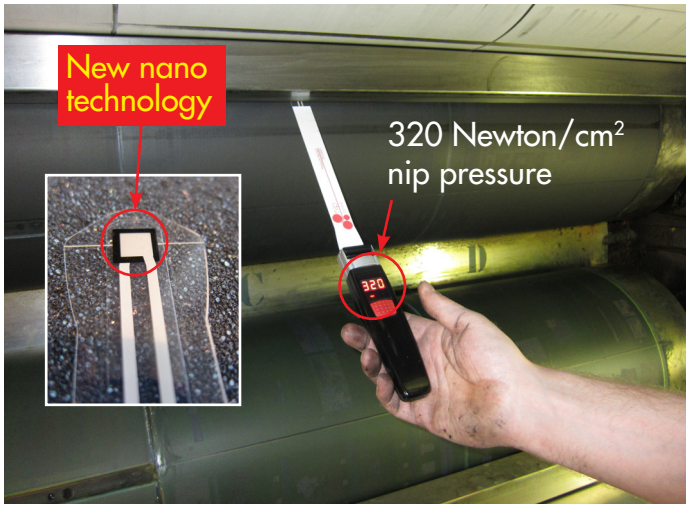
nip control

Why estimate blanket height when interested in pressure?

Optimal transfer of the ink-water emulsion from plate to blanket and, finally, to paper, is fundamental to superior and stable print quality.

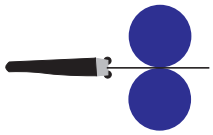
Now, for the first time, rapid measurement of nip pressure between cylinders is possible – thanks to the innovative **Pressure Indicator™**!

Nip Control's **Pressure Indicator™** makes it easy to monitor nip pressure changes over time or determine how pressure changes with different underpackings, blanket compressibility and more. The **Pressure Indicator™** can help decide whether a printing problem can be attributed to pressure variation in a cylinder nip.



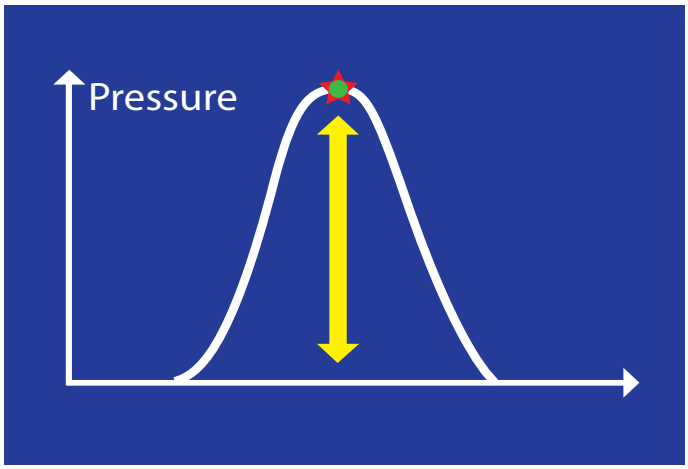
Simple to use

Allow the cylinders to draw the tip of the thin sensor blade through the nip, to provide an instant nip pressure value on the display.



Peak Value

All nips have a pressure curve. The **Pressure Indicator™** monitors the pressure increase as the tip of the sensor blade moves through the cylinder nip (**Rolling Nip™**). The instrument then displays the peak pressure value.
The peak pressure is what transfers the halftone dot from the plate to blanket and – eventually – to the paper!



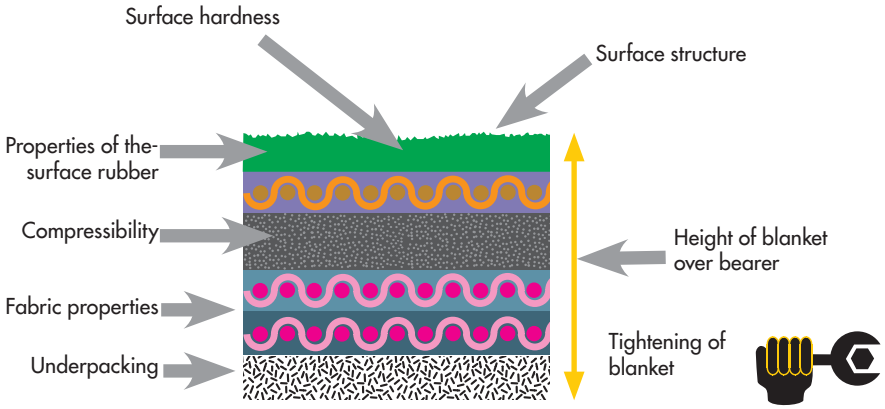
Commonly, a mounted offset blanket is monitored by measuring the height of the blanket in millimeters or inches. Compared to the precision of the **Pressure Indicator™,** however, this is something of a "trial and error" approach to estimating the pressure level between plate and blanket, and blanket and impression cylinder.

Simple calibration

Just insert the pressure sensitive tip of the sensor blade into a calibration tool. Press the control button twice – and calibration is complete!

nip control

Blanket properties affecting nip pressure



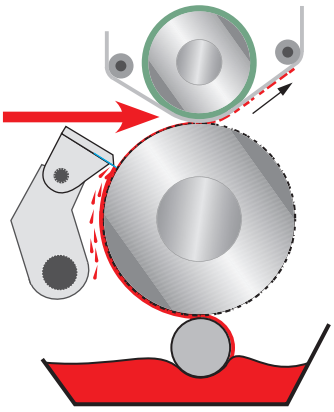
The above illustration shows the multiple blanket properties that combine to determine nip pressure. Blanket properties can vary over time. For example, through usage, the compressibility layer will "sink", reducing nip pressure. At the same time, the surface rubber hardens, producing an increase in nip pressure.
Uniquely, the **Pressure Indicator™** provides a true reading of nip pressure that accounts for any variations in blanket properties at the precise moment of measurement.

Rotogravure

In gravure presses, the measuring is performed between the impression roll and the gravure cylinder.

"We have learned much about nips in different gravure presses and how to standardize"

Mr. Kobayashi Atsuchi
Manager of Dainihon, Japan

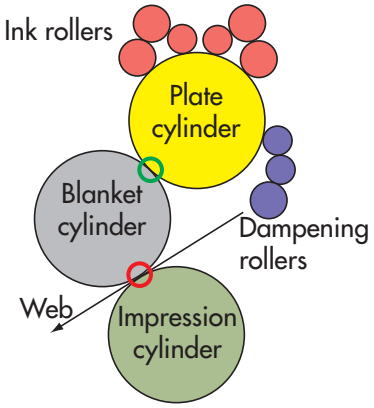


nip control

Pressure Indicator™ measuring system

- hand device
+ sensor blade
+ calibration tool

Where to measure in the offset printing press



- plate to blanket
- blanket to impression (in perfecting machines blanket to blanket)

Specification

Pressure Indicator instrument	Part Number	P102
Sensor blade	Part Number	PS35001
Calibration tool	Part Number	C101

Sensor blade length	350 mm/13.8″
Sensor blade thickness	0.2 mm/0.008″
Nip width	≥ 5 mm /0.2″
Cylinder diameter	All sizes
Nip temperature	10–70°C/50–158°F
Cylinder surfaces	Metal to rubber/rubber to rubber
Rubber hardness	< 95° shore A
Measurements per sensor	Tested up to 4000 times
Measuring unit (force/area)	Newton/cm^2
Measurement range	20–999 N/cm^2
Display resolution	1 N/cm^2
Patent	SE-519 918. Patent Pending

Simple to use

- One-button control
- Bright LED display for easy readings
- Standard AAA batteries and power save function
- Sensor blade can measure with either side towards either cylinder
- Three-step safety design to protect the operator
- Can be used on all offset presses from any manufacturer
- Delivered in a robust instrument case

Other Nip Control instruments

Rapid and precise measurement of nip width between ink and dampening rollers with the

Roller Nip Indicator™

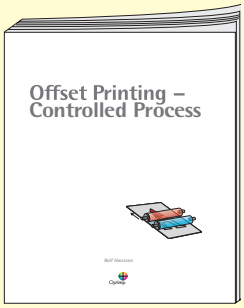
• Poor ink transfer
• Ink build-up
• Plate wear
• Web wander
• Web breaks
.....may be the result of poorly aligned cylinders or too much/too little pressure

The Pressure Indicator™ is alone in indicating incorrect pressure settings

Trend-analysis software featuring customized screen design to simulate your own press

hansson nips

Learn more about offset technology:



New handbook for printers and universities.
Order at **www.optirep.net**

"The Pressure Indicator is of great help when checking press settings and exploring other technical print problems"

Thomas Sandström, Technical and Production Manager, Daily Print.
Production per day: 300.000 copies

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