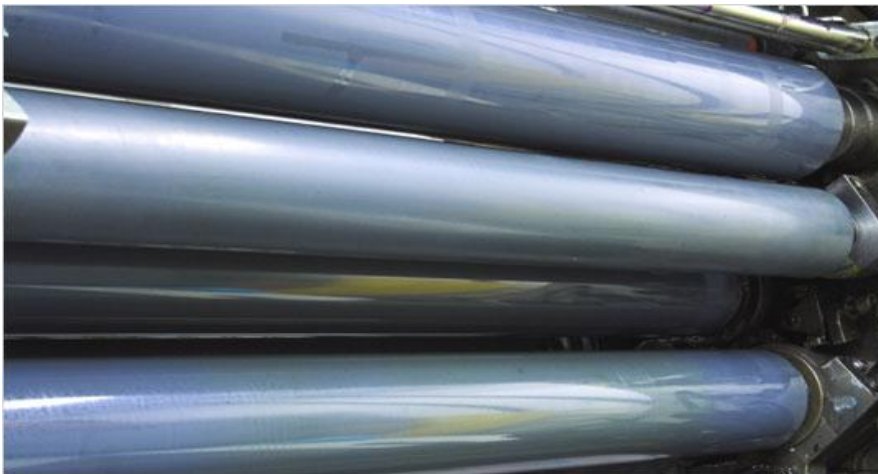




Pressure Metrics LLC.

## Nip Impressions

A nip is the pressure between two rollers that are forced together. A nip impression is a measure of the uniformity of that pressure. The pressure profile is sometimes referred to as a footprint. It can be measured in many ways. The simplest is to make sure that there is pressure everywhere across the width. A good approach is to measure the width of the footprint. If the width is uneven, the pressure profile must also be uneven. However, measuring nip widths accurately can be difficult if the width is narrow. The very best measure of the nip is to measure the pressure profile directly. Both nip widths and nip pressures can be measured with paper thin products often referred to as nip impression film. Nip impression film behaves like carbon or carbonless paper which turns color when a sufficient pressure has been applied such as by typing or writing with a pen. This is an indispensable tool for machine PM or process troubleshooting. Fujifilm Prescale is a perfect tool for measuring nip impressions.



Simply place Fujifilm Prescale between any two surfaces which come into contact. Varying colors of red patches will instantly appear on the Prescale film, revealing the pressure distribution between the surfaces. Furthermore, the intensity of the red colors of the Prescale film is related to the amount of pressure applied to it.

**Two-sheet Prescale Film:** Prescale Film is composed of an A-Film, which is coated with a micro-encapsulated color-forming material, and a C-Film, which is coated with a color-developing material. The A-Film and C-Film must be positioned with the coated sides facing each other.

**Mono-sheet Prescale Film:** The color-developing material is coated on a polyester base, with the micro-encapsulated color-forming material layered on top.

**Ranges:**

<u>EXTREME LOW (4LW)</u>	<u>7.2 ~ 28 PSI (0.5 ~ 2 kg/cm<sup>2</sup>)</u>	<u>10' x 10.6" (3m x 270mm)</u>
<u>ULTRA SUPER LOW (LLLW)</u>	<u>28 ~ 85 PSI (2 ~ 6 kg/cm<sup>2</sup>)</u>	<u>16' x 10.6" (5m x 270mm)</u>
<u>SUPER LOW (LLW)</u>	<u>71 ~ 355 PSI (5~25 kg/cm<sup>2</sup>)</u>	<u>19' x 10.6" (6m x 270mm)</u>
<u>LOW (LW)</u>	<u>355 ~ 1,420 PSI (25~100 kg/cm<sup>2</sup>)</u>	<u>39' x 10.6" (12m x 270mm)</u>
<u>MEDIUM (MS)</u>	<u>1,420 ~ 7,110 PSI (100~500 kg/cm<sup>2</sup>)</u>	<u>39' x 10.6" (12m x 270mm)</u>
<u>HIGH (HS)</u>	<u>7,110 ~ 18,500 PSI (500~1,300 kg/cm<sup>2</sup>)</u>	<u>39' x 10.6" (12m x 270mm)</u>
<u>SUPER HIGH (HHS)</u>	<u>18,500 ~ 43,200 PSI (1,300~3,000 kg/cm<sup>2</sup>)</u>	<u>39' x 10.6" (12m x 270mm)</u>



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