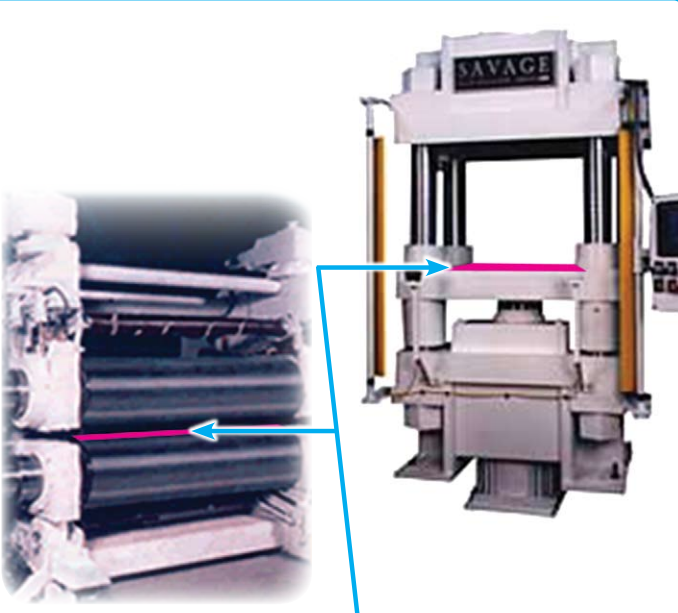


# TACTILE PRESSURE INDICATING SENSOR FILM

## Application: Battery Lamination

Fujifilm Prescale® is a unique, affordable and easy to use tool that reveals the distribution and magnitude of surface contact pressure in your battery lamination and calendaring press.

### FUJIFILM PRESCALE® IN A BATTERY LAMINATION PRESS



Place Fujifilm Prescale® tactile surface sensor here

### BENEFITS

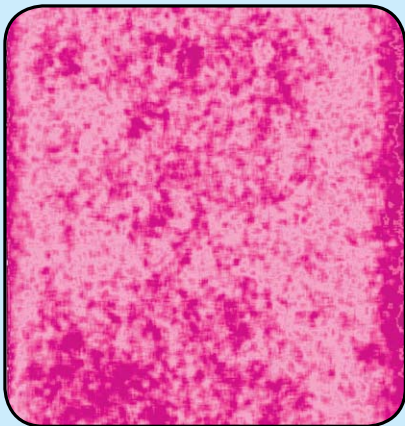
- ▶ Correct uneven lamination
- ▶ Minimize delamination during battery discharge
- ▶ Minimize poor contact between the electrodes and their current collectors
- ▶ Quickly observe and correct uneven thicknesses

Fujifilm Prescale® sensor film is used to measure surface contact pressure across both lamination platens and calendaring rollers. Fujifilm Prescale® reveals both pressure distribution and magnitude between these surfaces in a dramatic surface “map.”

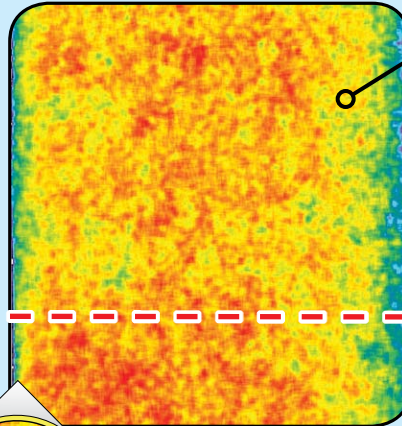
When placed in your lamination or calendaring press, the film instantaneously and permanently changes color in direct proportion to the actual pressure applied. Philosophically similar to the indication given by Litmus paper. Precise pressure magnitude is then easily determined by comparing the resultant color intensity to a standardized color correlation chart. No training or instrumentation is required.

### Fujifilm Prescale® film captures and reveals a complete pressure profile “map”

#### STEP 1



#### STEP 2

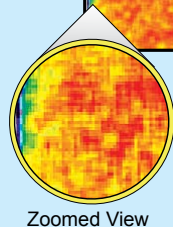
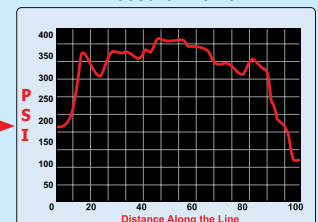


Color Indicates Precise PSI Value

#### Pressure Statistics

Sample Pseudocolor Rep	
Image:	Sample Pseudocolor Rep
Pressure	
Average	26.050 PSI
Std. Dev	57.93 PSI
Area	0.14 sq.in
Force	39.44 lbf
Minimum	20.319 PSI
Maximum	43.200 PSI
Format :	###

#### Pressure Profile

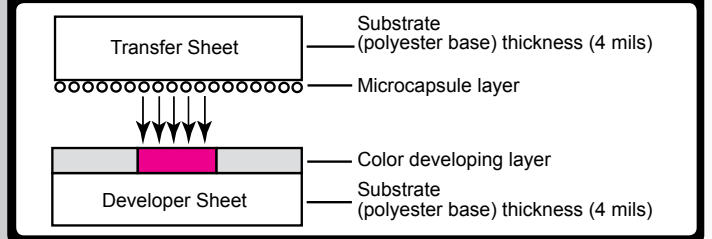


# Tactile Pressure Indicating Sensor Film

## Accurate, Cost-effective, Easy to Employ Pressure Mapping Technology

Have you ever needed to evaluate pressure or force between two touching or mating surfaces? Previously, your only alternatives were strain gauges and load cells, that are both time consuming and difficult to interface. Now with the advent of our disposable one-time use pressure film, Fujifilm Prescale®, evaluating surface contact pressure distribution and magnitude is accurate, quick and highly economical.

### CROSS SECTIONAL VIEW OF FUJIFILM PRESCALE® FILM



## 7 Sensitivities To Accommodate A Wide Range Of Pressures

FILM TYPE	PRESSURE RANGE	
EXTREME LOW	7.2 - 28 PSI	(0.5 - 2 kg/cm <sup>2</sup> )
ULTRA LOW	28 - 85 PSI	(2 - 6 kg/cm <sup>2</sup> )
SUPER LOW	70 - 350 PSI	(5 - 25 kg/cm <sup>2</sup> )
LOW	350 - 1,400 PSI	(25 - 100 kg/cm <sup>2</sup> )
MEDIUM	1,400 - 7,100 PSI	(100 - 500 kg/cm <sup>2</sup> )
HIGH	7,100 - 18,500 PSI	(500 - 1,300 kg/cm <sup>2</sup> )
SUPER HIGH	18,500 - 43,200 PSI	(1,300 - 3,000 kg/cm <sup>2</sup> )

### INDUSTRY APPLICATIONS

<b>AEROSPACE</b>	Composite Layups, Material Testing, Bolted Joints
<b>AUTOMOTIVE</b>	Gasketing, Impacts, Fuel Cell Stacking, Clutches, Brakes, Tire Tread
<b>ELECTRONICS</b>	Heat Sinks, LCD Bonding, PCB Lamination, Wafer Bonding/Polishing
<b>MEDICAL</b>	Clamping, Gait Analysis, Ergonomics, Orthotics and Prosthetics

<b>PACKAGING</b>	Heat Sealing, Converting
<b>PLASTICS</b>	Lamination Press, Die Extrusion Injection Molding, Stamping
<b>PRINTING/PAPERMAKING</b>	Nip Impressions

### PHYSICAL SPECIFICATIONS

<b>OPERATING TEMPERATURE</b>	41°F to 95°F (5°C - 35°C) (much higher for brief exposure)	<b>SUBSTRATE</b>	Polyethylene Terephthalate (PET)
<b>HUMIDITY RANGE</b>	20% to 90% RH	<b>ACCURACY</b>	±10% visual, ±2% utilizing optional optical measurement systems
<b>GAUGE</b>	4, 8, or 20 mils	<b>SHELF LIFE</b>	2 years
<b>SPATIAL RESOLUTION</b>	5 to 15 microns		

MSDS Available Upon Request.



**Sensor Products Inc.**  
300 Madison Avenue  
Madison, NJ 07940 USA  
Phone: 1.973.884.1755  
Fax: 1.973.884.1699  
www.sensorprod.com

[www.sensorprod.com](http://www.sensorprod.com)

Sensor Products, Inc. is an authorized distributor for Fujifilm Prescale® in the U.S.A., Canada, Mexico & the Caribbean only. Fujifilm Prescale® is a registered trademark of Fujifilm Corp. ©2011 Sensor Products, Inc. Updated 04-11-2011