

pressure film, Pressurex, Sensor Products Inc

Film Promotes Uniform Nip Pressure Distribution to Reduce Dry Film Resist PCB Lamination Defects

News Release from: [Sensor Products Inc.](#)

13/10/2009

Pressurex film from Sensor Products Inc. is a quick, accurate and economical way to detect and correct pressure variations in the lamination of dry film resist to the board substrate. When placed between nip rollers in the lamination press, the film instantaneously and permanently changes color directly proportional to the actual pressure applied.

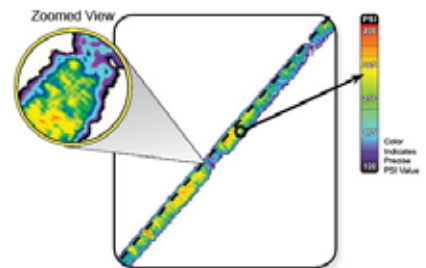
With Pressurex, variations in pressure that can lead to defects are easily detected and corrected—decreasing scrap, improving yield, and increasing productivity.

Even, consistent bonding of the thin layer of photoresist is critical to the board's subsequent electrical performance. The photoresist material is placed on the board's surface using a hot roller system. If the rollers do not exert uniform pressure across the board's surface, the thin photoresist layer can fail to adhere, bubble or even wrinkle during the process. This causes electrical instability and possible failure of the resulting board.

Pressurex reduces lamination defects by ensuring alignment and parallelism of the rollers. The film is placed between two rollers before closing the nip and applying pressure.

Instantly a pseudo color map of pressure magnitude and distribution is revealed. The precise pressure magnitude is easily determined by comparing color variation results to a color correlation chart (conceptually similar to interpreting Litmus paper).

Pressurex® is virtually indispensable for manufacturing process control and machine/component inspection. The pressure-indicating film is very thin (4 mil or 8 mil thick) and can be hand- or laser-cut to any size or dimension. It is flexible and conforms to curved surfaces and tight spaces.



Pressurex Film Reveals the Nip Roller Pressure Profile in the PCB Lamination Press