New Product: 'Pressurex' sensor film from Sensor Products gives production quality control

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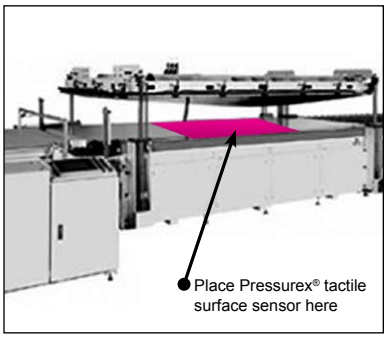

Product Briefing Outline: Sensor Products Inc. has introduced 'Pressurex,' a surface pressure indicating film that reveals pressure magnitude and distribution between any two contacting or mating surfaces. Through the quality control process, photovoltaic efficiency is increased by reducing the production of solar modules that have been subjected to improper pressure.

Problem: In the Photovoltaic industry, the need to reduce peripheral cracks on solar cells has received much attention. During assembly operations, uneven pressure distribution on lamination and frame presses can cause edge or surface damage and micro cracks that allow moisture ingress, resulting in degraded solar module performance. Thin film modules of CDTE or CIGS on glass or flexible substrates are more susceptible to moisture ingress and require stringent quality control checks.

Solution: Pressurex surface pressure indicating film provides a low-cost solution for quality control checks during equipment setup, calibration, as well as re-qualification of a solar module production line. At least three specific assembly steps would benefit from the use of Pressurex sensors: lamination, the frame press stage, and attachment of junction boxes. Pressurex assures proper pressure magnitude to cause polymerization and securely bond multiple layers together during EVA and PVB lamination. With respect to the frame press stage, Pressurex sensor film helps verify adequate frame-to-module edge sealing. This unique Mylar-based sensor film reveals surface pressure from 2 - 43,000 PSI (0.14 - 3,000 kg/cm²). The film is actually placed at the interface of two contacting surfaces. When these surfaces are compressed together (in a lamination press for example) they apply a force to the sensor film. The film captures this applied force permanently and irreversibly by virtue of its changing color. Intensity of the color change is proportional to the amount of pressure applied, thus allowing for precise determination of pressure magnitude by comparing the resultant sensor film's color to a color calibration reference chart.

Applications: Tactile pressure indicating film provides process control and monitoring of solar module production equipment.

Platform: Mylar-based sensor film reveals surface pressure from 2 - 43,000 PSI (0.14 - 3,000 kg/cm²). Temperature range is up to 752° F° (400° C°). Material gauge from 2 to 5 mils. Supplied in rolls up to 2 ft x 100 ft (0.6 m x 30 m).

Availability: March 2009 onwards.