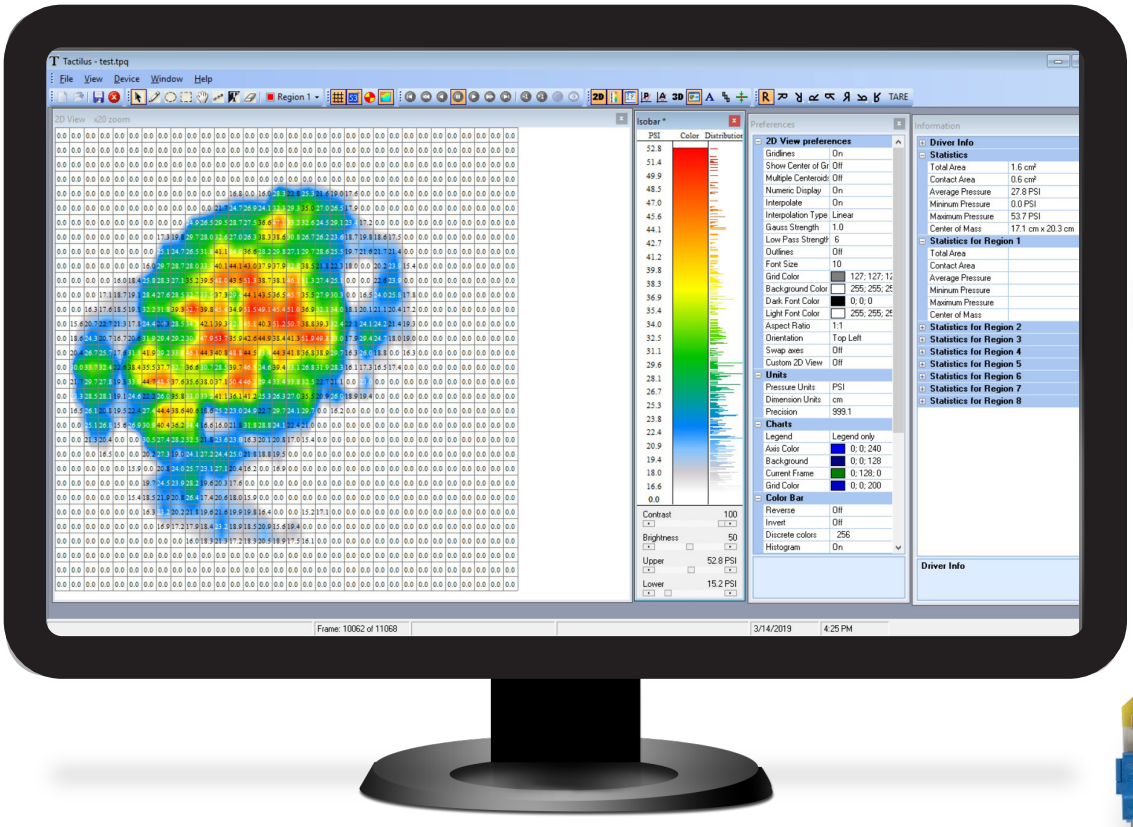
Tactilus®
Nano-Polymer Core | C-Series

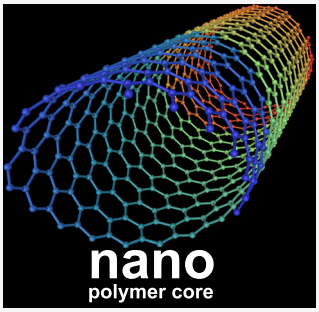
Ultra High Density Spatial Resolution

Now with an industry leading 0.4 mm pitch!



Tactile Surface Pressure Analysis

THE INNOVATION: Exciting advanced in conductive ink printing have allowed us to introduce the tightest resolution available in the market. It literally provides almost the same spatial resolution of touch sensation as the human finger! State of the art stainless steel silk screens, constructed at high-tension and made in a clean room environment are the foundation for our new ultra high density sensors.



WHAT IT MEANS: Tactilus® allow the user to capture and record pressure conditions occurring in between any two contacting or impacting surfaces in real time. The paper-thin Tactilus® sensor is actually placed at the contact interface where it records and assimilates both pressure distribution and pressure magnitude on your Windows® based computer.

Common Applications

Packaging
nip impression, heat sealing

Automotive
brake pad, clamping, clutch, fuel cell, gasket/bolted joint, impact study, lamination

Electronics
heat sink, BGA, connector, lamination, LCD bonding, wafer bonding/polishing

Aerospace
composite layup, fuel cell, lamination

Ergonomics
biomechanics, body mapping

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Tactilus® Technology

Tactilus® is a matrix-based tactile surface sensor — essentially an “electronic skin” that records and interprets pressure distribution and magnitude between any two contacting or mating surfaces and assimilates the collected data into a powerful Windows® based tool kit. Each Tactilus® sensor is carefully assembled to exacting tolerances and individually calibrated and serialized.

The architectural philosophy of Tactilus® is modular, allowing for portability, easy scalability, and simultaneous data collection from up to four discrete sensor pads Tactilus® employs sophisticated mathematical algorithms that intelligently separate signal from noise, and advanced electronic shielding techniques maximize the sensor’s immunity to noise, temperature and humidity.

Specifications

Active Technology
Nano-tubes Composite

Surface Pressure Range
0 - 150 PSI (0 - 10.5 kg/cm^2)

Matrix Size
Up to 32 x 32

Sensing Points
Up to 1,024 total

Sensing Area Size
0.5 in. x 0.5 in. (1.3 cm x 1.3 cm)

Scan Speed
Up to 800 FPS

Temperature Capability
Up to 200°F (93°C)

Spatial Resolution
From 16 mils (0.4 mm)

Thickness
16 mils (0.4 mm)

Accuracy
± 10%

Repeatability
± 2%

Hysteresis
± 5%

Non-linearity
± 1.5%

Minimum Spacing between sensing points
0.0089”(0.23mm)

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Updated 08-31-20