

Tactilus® Technology

WHAT IT DOES

Tactilus® allows 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.

THE INNOVATION


Exciting advancements in conductive textiles have allowed us to develop a sensor that conforms better to your surface than ever before. Not only does the sensor conform better to curved surfaces but it stretches to alleviate shearing affects caused by shifting contact surfaces - an innovation that no other sensor company

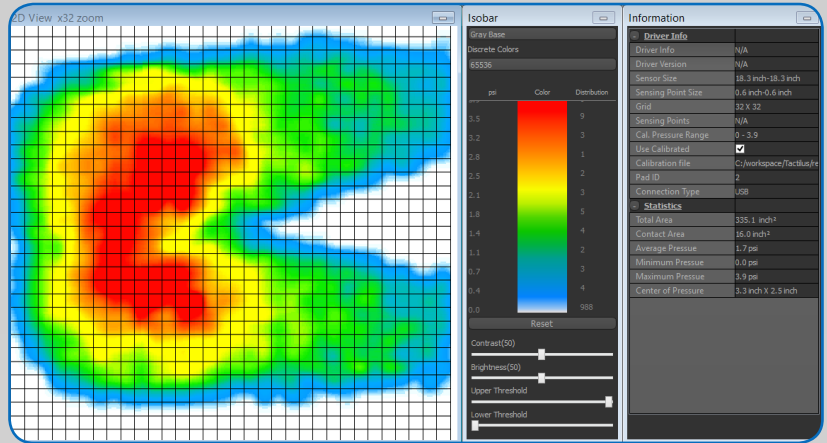
can touch! By biomimicking human skin we've taken surface contact pressure measurement to a whole new level.

Tactilus® now has all the electronics safely encapsulated on the sensor element itself. The Tactilus® sensor consists of a series of interlaced lines that create a matrix with as many as 16,384 unique sensing points. Tactilus® Windows® based software communicates with the sensor up to a theoretical 1,000 frames per second - fast enough for impact force measurement. For users desiring direct interfacing with their own control software Sensor Products can supply an API.








BENEFITS OF TACTILUS®

- ◆ Highly conformable and elastic sensor. 
- ◆ True calibration. Now NIST traceable.
- ◆ No cumbersome external electronics. They're safely built into the sensor.
- ◆ No training required. Hit the ground running.
- ◆ Durability like no other sensor.



Tactilus® software assimilates complex data into easily accessible graphics

INDUSTRIES WE SERVE

-  **Packaging**
nip impression, heat sealing
-  **Automotive**
brake pad, clamping, clutch, fuel cell, gasket bolted joint, impact study, lamination
-  **Human Body Interface**
grip pressure, ergonomics, biomechanics, body mapping
-  **Electronics**
BGA, connector, fuel cell, heat sink, lamination, LCD bonding, wafer bonding/polishing
-  **Aerospace**
composite layup, fuel cell, lamination



Tactilus® sensor element placed on a lamination press

SPECIFICATIONS

Technology	Piezoresistive	Stretchability	Up to 158%
Pressure Range	0.1 to 200 PSI (0.007 to 14.1 kg/cm ²)	Calibration	NIST Traceable
Max Matrix Size	Up to 64 x 256 lines	² Software Compatibility	Windows 8,7, XP
Max Sensor Pad Size	Customizable up to 150" (381 cm)	Accuracy	± 10%
Thickness	From 7 mils (0.18 mm)	Repeatability	± 2%
¹ Scan Speed	Up to 1,100 Hz	Hysteresis	± 5%
Min Sensing Point Size	0.188 in ² (1.21 cm ²)	Non-linearity	± 1.5%

1. Only for some configurations with fewer sensing points.

2. An API can be provided to users who need real-time connectivity to their own software.



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