

# REAL-TIME TACTILE PRESSURE ANALYSIS

## Application: Pressure Indicating Washer



Tactilus® pressure indicating washer sensor on bolted interface

**LESS THAN \$10 PER TEST!**

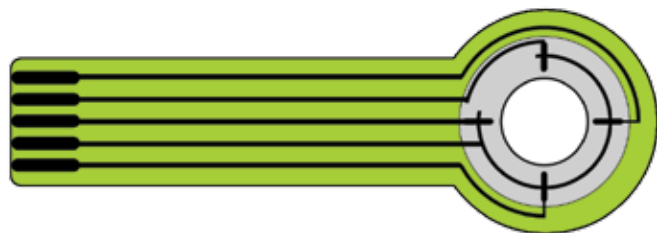


The Tactilus® pressure indicating washer is a revolutionary new means to measure and assess bolted joint tension, design and efficacy. Unlike traditional strain gauged load cells and force washers, the Tactilus® pressure sensor is extremely thin, non-invasive and highly economical. The Tactilus® pressure sensor system is a valuable aid in R&D.

Upon the application of tension the Tactilus® pressure indicating washer reveals precisely how much pressure (tensile load) is being applied at the interface of the bolt and flange surface and how this pressure is circumferentially distributed.

With Tactilus® you only have to invest once in electronics and as your bolt tension monitoring evolves, only the custom tailored sensor element needs to be adapted.

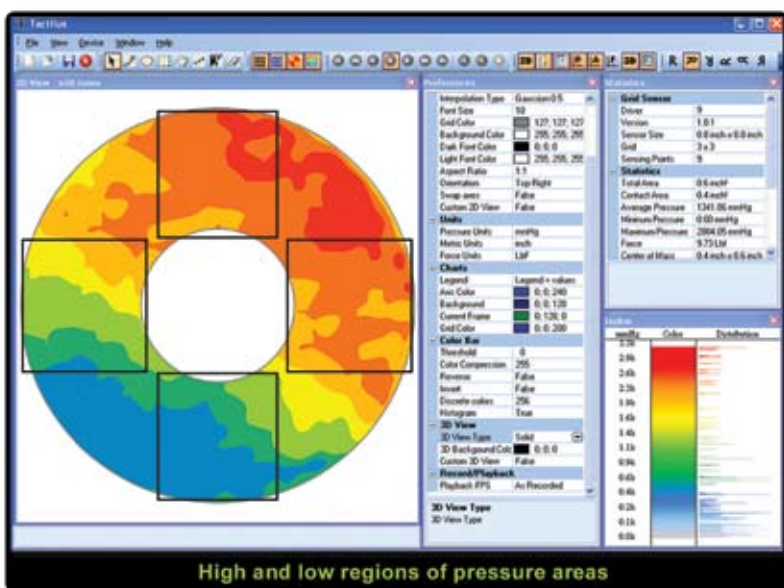
**Tactilus® Technology:** Tactilus® is a tactile surface sensor. Essentially an “electronic skin” that records and interprets pressure distribution and magnitude between any two contacting or mating surfaces and assimilates that data collected into a powerful Windows® based tool kit. Each Tactilus® sensor is carefully assembled to exacting tolerances, individually calibrated and serialized. Tactilus® employs sophisticated mathematical algorithms that intelligently separate signal from noise, and has advanced electronic shielding techniques to maximize environmental immunity to electromagnetic noise, temperature and humidity.



Tactilus® pressure indicating washer sensor illustration

*“The Tactilus® pressure indicating washer is the most economical, scientific and user-friendly system for bolt tension evaluation available today.”*

~ Jeffrey G. Stark, CEO



High and low regions of pressure areas

### SENSOR SPECIFICATIONS

Technology	Resistive
Pressure Range	0 - 250 PSI (0 - 17.5 kg/cm <sup>2</sup> )
Sensing Points	Up to 4
Max Simultaneous channels	Up to 4
Total Sensing Area	Customizable to application
Scan Speed	Up to 100 hertz
OD	Variable from 0.52 in (1.32 cm)
ID	Variable from 0.11 in (0.28 cm)
Thickness	14 mils (0.35 mm)
Accuracy	± 10%
Repeatability	± 2%
Hysteresis	± 5%
Non-linearity	± 1.5%

The Tactilus® load washer sensor system comes equipped with everything you need for your analysis: the sensor element, electronics controller and Windows-based software.