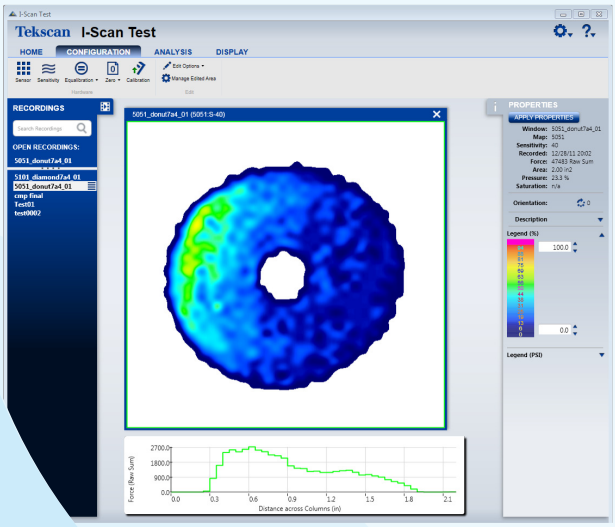
Tekscan®

I-Scan® Test

Tactile Pressure Measurement System



I-Scan® Test can measure relative interface pressure between two surfaces. The system utilizes an exceptionally thin tactile sensor that provides minimal interference between the objects being measured, mapping pressure distribution between two surfaces. Pressure distribution images offer vital information and insight to enhance product design, manufacturing, quality, and research.

KEY BENEFITS

Manufacturing:

- Verify calibration of machinery
- Improve repeatability of processes
- Reduce downtime & improve yields

Quality Control:

- Map surface pressure behavior
- Identify potential failure modes
- Quality inspection & control
- Competitive benchmarking

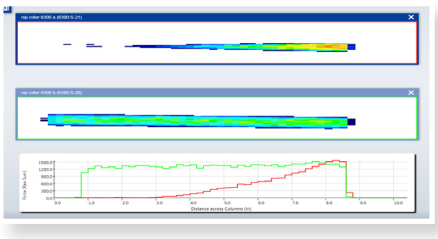
Product Design:

- Verify forces and peak pressures between two components
- Measure external forces
- Reduce failures & associated costs

UTILIZATION

Single I-Scan Test System

I-Scan Test provides valuable insight by measuring and mapping relative interface pressure.

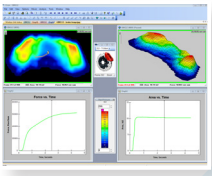


I-Scan with Multiple I-Scan Test Systems

When paired with a full I-Scan system, I-Scan Test can serve as a distributed module for data collection. The full I-Scan system generates a calibration file that is loaded into I-Scan Test, allowing I-Scan Test to measure force and pressure in engineering units

- Machine set-up
- Quality control
- Test & measurement
- Research & development
- Design validation

Full I-Scan



In-depth analysis and calibration

I-Scan Test

I-Scan Test

Data collection and machine set-up

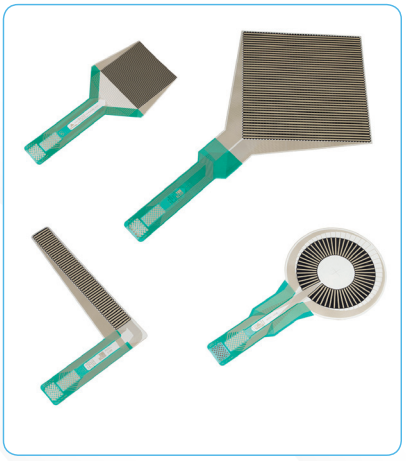
I-Scan Test

The I-Scan Test system is made up of a sensor, data acquisition electronics, & software.

SENSORS

Over 200 flexible, thin film sensors are available in different sizes, shapes, resolutions, temperature ratings, and pressure ranges (up to 25,000 psi or 1,700 bar).

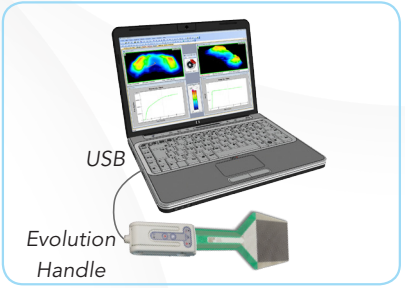
- High spatial resolution:
  - Up to 248 sensing elements/cm^2 (1,600 sensing elements/in^2)
  - Sensing elements with as narrow as 0.1 mm (0.02 in.) spacing
- Sensing area ranging from 3 mm x 3 mm (.12 in. x .12 in.) to up to 1,734 mm x 1,768 mm (68 in. x 69 in.)
- Optional high-temp sensors can withstand up to 200°C (392°F)



Examples from our wide breadth of sensor options.

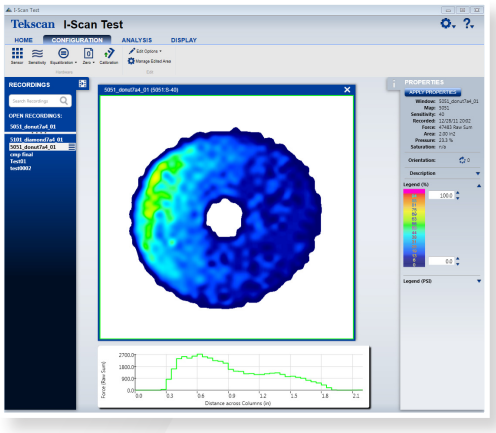
DATA ACQUISITION ELECTRONICS

In order to obtain the pressure data, our data acquisition electronics scan the thousands of sensing points within each sensor. I-Scan Test includes an Evolution® data acquisition handle, which easily connects to a PC via a single USB cable.



SOFTWARE

I-Scan Test provides valuable insight by mapping relative pressure distribution between two surfaces. Data and imagery of the pressure distribution are shown in real-time with the ability to take a snapshot and save.



Software Features

- Real-time display of pressure
- Capture a snapshot of pressure distribution for records or future analysis
- Histogram display of distribution (pressure, force, area, & identify center of force)
- Compare current measurement to baseline or calibrated setup

Tekscan®

CONTACT US TODAY FOR A DEMONSTRATION!

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SF_Rev A_020215