



2-D view of pressure distribution during heavy braking.



# Seatbelt Impact Analysis

## REAL-TIME PRESSURE PROFILING

The Tactilus® Seatbelt sensor displays a detailed analysis of the body in contact with the seatbelt in real time. The Tactilus software provides both a static and dynamic picture of the individual, while in motion. Tactilus® provides precise result under dramatic braking conditions when the seatbelts are taut against the body. The sensor displays pressure point distribution and provides data that can be used to design seatbelts to maximize safety of the passenger and reduce injury due to collisions.

Tactilus® reports and collects data of pressure response between two contacting surfaces. It then transmits that data to our fully customizable software where a dynamic pressure distribution is displayed. The image may be magnified for region of interest viewing, and the software can display statistical analysis of average and minimum/maximum pressure. Further individual frame and trend analysis can be performed in Microsoft Excel. The system comes complete with sensor, data hub, USB connection, and Tactilus® software.

### FEATURES

- 100% Customizable
- Pre-calibrated for application pressure
- Flexible and durable sensor elements
- Resistant to electromagnetic noise
- Modular architecture with interchangeable sensor elements
- Movie viewing of results in Tactilus® software
- 2-D and 3-D imaging
- USB connection
- Windows® compatible software

### SENSOR SPECIFICATIONS

Pressure Range	0.1 to 2000 PSI (0.007 to 140.61 kg/cm <sup>2</sup> )
Sensor Size	Customizable from 1 sq in (2.54 cm <sup>2</sup> )
Spatial Resolution	Customizable from 0.28 in (7 mm)
Scan Speed	1,000,000 sensing points per second
Accuracy	± 10%
Repeatability	± 2%
Hysteresis	± 5%
Non-linearity	± 1.5%

