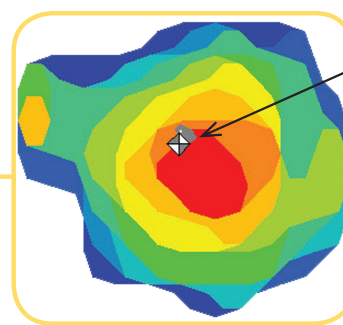
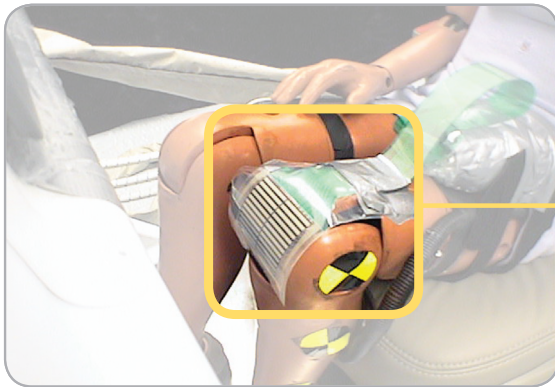


Tekscan's High Speed *I-Scan* is a robust system that can assist in measuring fast applications. High Speed *I-Scan* is an enhanced version of *I-Scan* that supports faster sensor scanning speeds (up to 20,000 Hz). The High Speed *I-Scan* has the same software as classic *I-Scan* providing powerful data acquisition, vivid 2-D and 3-D pressure displays, clear graphs and analytic capability with intuitive, easy to use controls. Dynamic force and pressure distribution events appear in real-time displays and the data is captured as a recording on your PC. Tekscan's sensors have a ~5 microsecond response time, ensuring almost instantaneous data capture. High Speed *I-Scan* uses patented thin sensors, which easily fit in tight areas, such as under shin pads or under airbag covers. Sensors are minimally disruptive to the true pressure pattern and provide output that identifies local, peak, and spatial pressures.



Center of Force

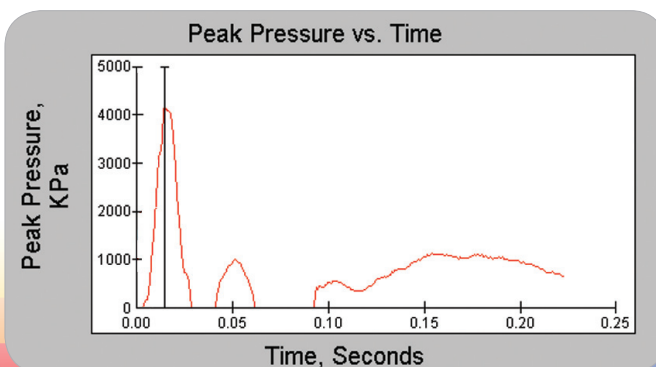
Localized peak pressure of knee to bolster impact

## KEY FEATURES:

- Fast, accurate, and repeatable measurements
- Dynamic recording and playback
- Graphing and data analysis capabilities
- Real-time pressure displays
- Durable & reusable sensors
- Sensor scan rates of up to 20,000 Hz/frames per second
- Easy set-up & portable

## APPLICATIONS:

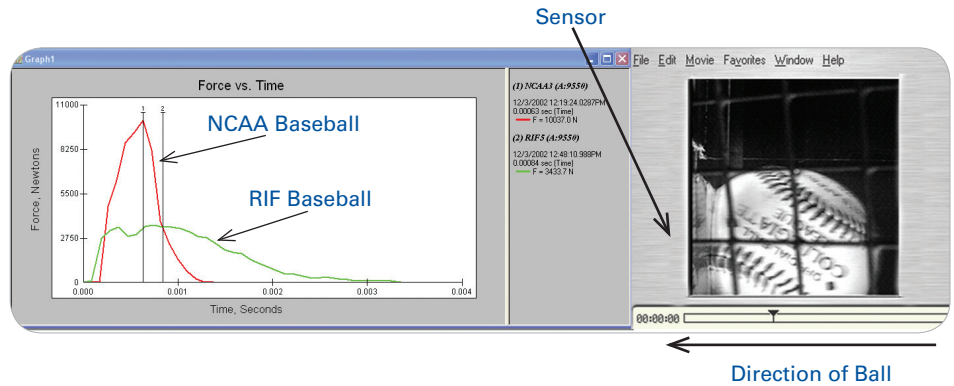
- Martial arts
- Impact studies
- Injury prediction
- Vibration studies
- Airbag cover design
- Automobile crash testing
- Protective gear design and assessment of athletic/military:
  - Helmets
  - Shoulder pads
  - Shin / knee guards
- Safety testing:
  - Glass breakage
  - Shoulder and lap belts
  - Knee bolsters and thorax
  - Child restraints and car seats
  - Automobile bumpers and hoods



Peak pressure vs. Time graph showing force on a crash test dummy knee

# KEY SOFTWARE FEATURES

- Acquire sensor data at up to 20,000 Hz frames/second
- Capture dynamic force, pressure, and contact area data
- Record data as “movies”
- Play-back pressure “movies”
- Display real-time and recorded data as 2D and 3D pressure images with graphs
- Plot pressure, area, and force data over time and distance
- Windows compatible copy and paste of pressure images or data values into other applications
- File output in ASCII format
- Save data files as AVI movies
- Ability to isolate and analyze specific areas
- View and compare multiple tests
- And much, much more!



High Speed *I-Scan* with Video Synch™ showing the impact of a baseball hitting a sensor.  
Sensor output is shown graphically - Force vs. Time

## SENSOR OPTIONS

The High Speed *I-Scan* comes standard with sensor models 9500 and 9550. Other sensors models can be substituted to fit your application needs.

Sensor Specifications	Model #9500	Model #9550	Model #5570	Model #5051	Model #5315
Sensing Area	71.1 mm x 71.1 mm (2.80 in. x 2.80 in.)	112.0 mm x 96.0 mm (4.41 in. x 3.78 in.)	212.3 mm x 82.3 mm (8.36 in. x 3.24 in.)	55.9 mm x 55.9 mm (2.20 in. x 2.20 in.)	487.7 mm x 427.7 mm (19.20 in. x 16.80 in.)
# of Sensing Elements	196	42	264	1,936	2,016
Spatial Resolution (X,Y)	5.1 mm x 5.1 mm (0.200 in. x 0.200 in.)	16.0 mm x 16.0 mm (0.630 in. x 0.630 in.)	4.8 mm x 13.7 mm (0.190 in. x 0.540 in.)	1.3 mm x 1.3 mm (0.050 in. x 0.050 in.)	10.2 mm x 10.2 mm (0.400 in. x 0.400 in.)
Scanning Rate (Hz)/ Frames per second	4,000	20,000	4,400	730	680

## RELATED PRODUCTS & OPTIONS

**Video Synch™** - Video sequences can be recorded and synchronized with pressure movies and simultaneously played in the software.

**Equilibration Devices** - Pneumatic devices apply a uniform pressure to the active area of the sensor to normalize output of each sensing element. The system electronically compensates for variation in individual sensing elements.



**Call Today for a Demonstration!**

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