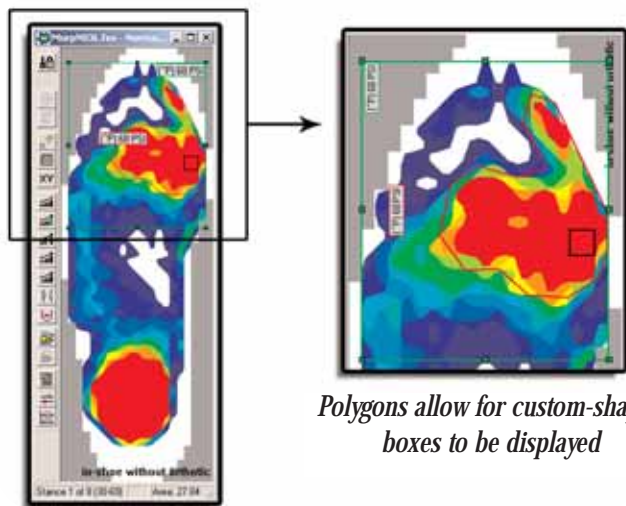


Research Foot Software

Add-On to F-Scan[®], F-Scan[®] Mobile, MatScan[®], HR Mat[™] & F-Socket[™]

The Research Foot software is available as an optional add-on to Tekscan's foot pressure and force measurement systems. This software provides added capabilities for meeting research desires and needs including additional calibrating points, data processing, and analysis. The data can also be exported for extended analysis, such as statistics, and significant interpretations for foot function and gait assessments, among others. This software provides the necessary tools and features for research applications.



Polygons allow for custom-shaped boxes to be displayed

25	START_FRAME 1
26	END_FRAME 500
27	UNITS PSI
28	ASCII_DATA @@
29	Frames(X), Time (X), Force (Y)
30	1, 0, 28, 5, 71, 49, 4, 39
31	2, 0.02, 28, 5, 72, 50, 4, 39
32	3, 0.04, 29, 6, 74, 52, 4, 40
33	4, 0.06, 29, 6, 75, 54, 3, 40
34	5, 0.08, 30, 6, 77, 56, 3, 41
35	6, 0.1, 30, 7, 78, 56, 3, 42
36	7, 0.12, 31, 7, 78, 56, 3, 42
37	8, 0.14, 32, 7, 80, 58, 4, 42
38	9, 0.16, 33, 7, 82, 60, 4, 44

ASCII saving capabilities for further data processing and analysis

Display Features Include:

Averaging

Sensels (sensing elements) with zero load and bordering a loaded sensel are included in averaging of the sensels. This provides for smoother pressure profile contour for visual interpretations, but can increase total contact area with presence of bordering unloaded sensels.

A-B Increment

Enables locating and identifying the time domain (time or frame number) and the elapsed time or frame numbers between two point events on the graph displays.

Objects

Allows for squared to irregular shape boxes to segment, isolate, and contour specific anatomical landmarks and regions. Objects can be the regular boxes, or Polygons having multi-sided boxes or irregular shapes.

COF (in boxes)

Allows viewing and assessing the Center of Force (COF) position and trajectory per anatomical landmarks and regions as defined by the Object Box. Provides analysis for compartments or areas of interest and selection.

Graphs

Graphs can be viewed in histogram display, in addition to curve displays. The horizontal X-axis can be viewed in distance domain, in addition to the standard domain. The vertical Y-axis can be adjusted to specific ranges (minimum and maximum) to optimize the visual display of the graphs for easy analysis and comparisons, and for import as images for presentation and publication purposes.

Operational Features Include:

Delayed Recording

Allows events to occur without data capture at beginning where by data is not recorded for a time interval between when recording is triggered and data is captured.

Comb-Cut

Allows reduction of data files to specific data for analysis by eliminating unnecessary data or prolonged movies and frames per movie.

Calibration

Allows for several options to optimize calibration procedure where one single load to sequential multi-loads, and for multi-regions, can be done.

Equilibration

Allows to baseline and uniform the output signal of the individual sensels by applying homogeneous pressure across the sensor.

ASCII

Allows data export for further specific data file configuration for import and analysis in other software such as databases and statistical packages.

External Triggering & Synchronization

Allows remote starting data capture from an external signal and enables synchronization with other data capture systems by sending an external signal. With the new VersaTek system and Hub, a Synch Port (a BNC connector) sends out a signal to start or synchronize other devices. The Trigger Port (a separate BNC connector) receives a signal from other devices to start a recording.