

# HR Mat™

## High-Resolution Barefoot Analysis

**EASILY CAPTURE DATA FROM SMALL CHILDREN OR SUBJECTS WITH SEVERE FOOT PATHOLOGIES**



*HR Mat* is ideal for performing a detailed analysis of pediatric foot function and gait. Low profile minimizes gait alterations and risk of tripping.

The *HR Mat*™ is a high-resolution mat system used for capturing barefoot plantar pressure to provide accurate and reliable information for studying foot function or analyzing gait. Collect data from multiple footsteps for an in-depth gait analysis or measure static pressure for evaluating asymmetries or foot function. With a thin platform (0.57 cm/ 0.225 in) the risk of gait alternations or tripping is reduced. The *HR Mat* is...

**Research validated and peer accepted** – used by leading researchers around the world for foot function analysis.

**Tekscan's highest spatial resolution mat system** – with the same resolution as the *F-Scan*® system, the *HR Mat* accurately profiles anatomical locations on the plantar surface.

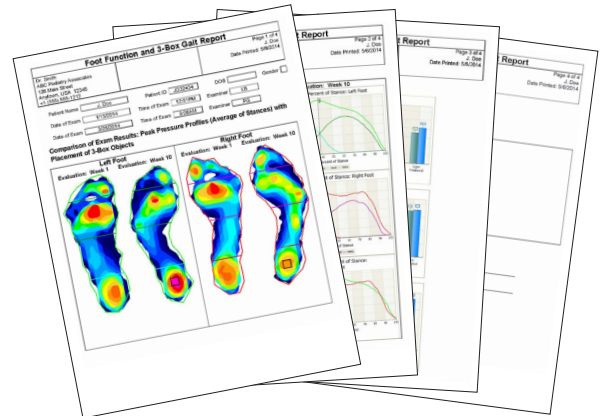
**Accurate and consistent data** – calibrate the system specifically to meet your needs. There is no need to send the system back for calibration.

**Compatible with gait lab technology** – the system synchronizes with force plates and other gait lab technologies like EMG and motion capture, as well as other *Tekscan* systems.

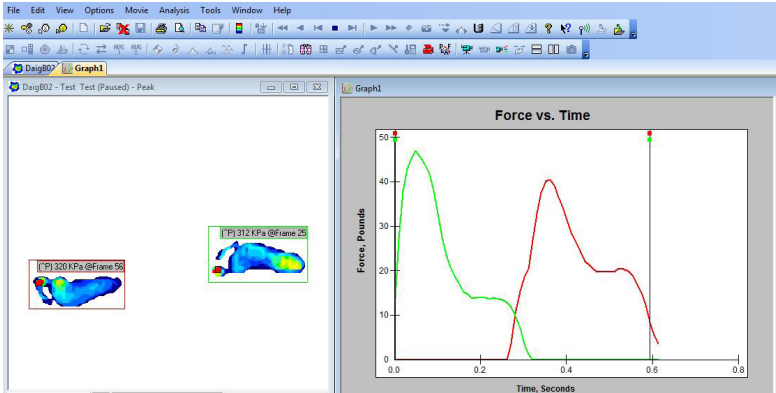
**Light-weight and portable** – easily transported system can be used in or out of the lab.

### COMING SOON: AUTOMATED REPORTING AND ANALYSIS!

Save time in post data collection through automated analysis and reporting included in the upcoming software release. The new software release for the *HR Mat* will be dedicated solely to the mat systems for focused data collection with exciting new features, like report generation at the push of a button. Automated 3-Box analysis, which segments the foot into three key regions: heel, metatarsal and total foot, generates tables for temporal gait parameters, force vs. time parameters and foot function parameters. Evaluate peak pressure with automated analysis that produces a table with information on pressure time integral, peak pressure gradient and the amount of time the pressure threshold has been exceeded. Get immediate feedback with real-time force vs. time curves. Software will be available in both Clinical and Research versions.



View the plantar pressure profile of the foot to reveal high-pressure areas, analyze the center of force trajectory or identify asymmetries between left and right feet. Export data for import into a spreadsheet for further analyses.



The *HR Mat* has the high spatial resolution of 4 sensels™ / cm<sup>2</sup> (25 sensels / in<sup>2</sup>).

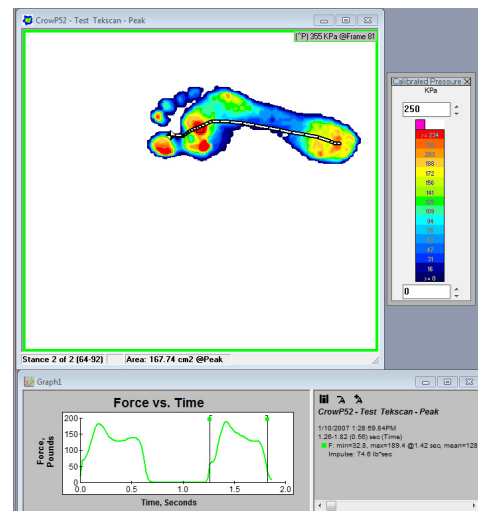
Capture data from a single step, multiple steps or a standing pressure assessments.

Graphs display the force vs. time curves for left and right feet for easy comparison.

Analyze center of force trajectory for any potential deviations.

Display data in 2D or 3D.

Identify areas of high pressure with a color-coded legend.



## EXPAND YOUR RESEARCH CAPABILITIES

With the same spatial resolution as the *HR Mat*, the *F-Scan* in-shoe analysis system provides complimentary data for your research needs. In addition to pressure and force data, the *F-Scan* in-shoe system provides you with temporal parameters and generates a comprehensive report in minutes. The *F-Scan* system allows you to see the position and trajectories for Center of Force (CoF) during stance phases of gait.

### Coordinate Data Collection of Complimentary Systems Wirelessly

With the optional *Trigger Bundle*, the data from the *HR Mat* System can be wirelessly synchronized with the data from other external systems such as motion capture, EMG or other *Tekscan* systems. The *Trigger Bundle* allows the *Tekscan* system to respond to a signal or send a sign to an external device to start or stop data collection. Frame congruence (frame trigger) between your *Tekscan* system and any other external recording device that sends pulse-per-frame trigger signals, such as video analysis and motion capture systems.

[WWW.TEKSCAN.COM/HIGH-RESOLUTION-PRESSURE-MAT](http://WWW.TEKSCAN.COM/HIGH-RESOLUTION-PRESSURE-MAT)