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.





HR MAT

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.



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.

The *HR Mat* has the high spatial resolution of 4 sensels[™]/ cm2 (25 sensels / in2).

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.



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



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