

Tekscan Pressure Mapping

The F-Scan® System captures dynamic in-shoe pressure and force information that reveals interaction between foot and footwear. Unlike traditional visual observation of foot function and gait, like most physical therapy practices or running stores, our F-Scan technology quantifies force, pressure distribution, and timing.

This technology is used to determine the proper treatment for gait or foot asymmetry and/or to confirm the effectiveness of past interventions. The analysis itself can be done before, during, or after treatments with your podiatrist.

For more detailed information about this service, please read below:

4P Method

Our biomechanist uses the following tangible and measurable parameters to establish a desired treatment outcome and/or to assess whether the outcome has been met or achieved. Our goal is to provide your podiatrist with quantitative information to improve or meet desired symmetry.

• TIMING

Timing refers to the amount of time the feet are in contact with the ground, and the speed with which they move during the stance phase.

• TRAJECTORY

Trajectory refers to the path that the center of force (CoF) travels during the stance phase.

• SYMMETRY

Symmetry refers to the pattern exhibited by the gait (Force vs. Time) curve during the stance phase.

• INTEGRAL/IMPULSE

Integral/Impulse refers to the relation between the amount of Pressure/Force applied throughout a period of time, that for which the load is applied to the plantar surface during the stance phase.

When timing, trajectory, symmetry and/or integral/impulse in foot function, gait and/or posture is off, torque is generated, and stress is transmitted along and within the tendons, muscles, ligaments and bones.

3 Box Method

Through the use of Tekscan, we are able to quantify what happens during the stance phase through the following three pivotal phases:

- Heel Pivot (0-10%)
- Ankle Pivot (10-30%)
- Forefoot Pivot (30-60%)

The interpretation of all these parameters provides a comprehensive evaluation of the dynamic interaction between your foot, your footwear and your gait. From this analysis, we are able to screen, diagnose, treat, monitor and/or interpret foot, gait and posture related disorders.

