MatScan® System

barefoot analysis

MatScan® is a low-profile floor mat system that captures barefoot plantar pressures. The objective and quantified data gathered by the system can be analyzed to support diagnosis and mode of treatment. Unlike traditional tests, *MatScan* provides insight into foot function and biomechanics, and identifies regions of high plantar pressure that cannot be seen with the naked eye. *MatScan* is available with either *Evolution*® or *VersaTek*® electronics and is now compatible with Wireless, Datalogger and/or Wireless/Datalogger.

- Screen patients on the basis of foot pressures, function, and postural related problems
- Quickly identify foot pressures, foot function and some gait parameters
- Monitor the progress / efficiency of foot function during rehabilitation or muscle training
- Recommend insoles and/or footwear in a retail setting

Applications:

- Identify plantar pressure profile discrepancies between left and right feet
- Screen for potential ulcerations
- Identify asymmetries during stance phase
- Perform in-depth analysis of foot function by isolating sections of the foot such as the heel, midfoot, and forefoot
- Review dynamic weight transfer and local pressure concentrations
- Monitor improvements in balance, strength & weight bearing

Benefits:

- Expand your practice through proactive foot screenings
- Reduce incidence of ulcers and/or pressure sores
- Observe what the neuropathic foot cannot feel
- Provide supporting documentation for fee-for-service approach and/or insurance claims
- Use as an educational tool to teach rehabilitation exercises for the lower limb

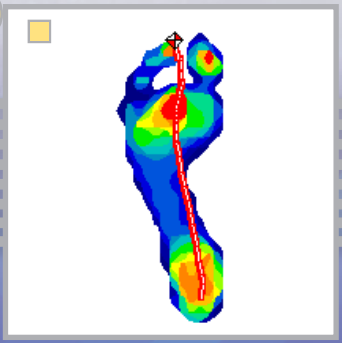
1. Connect

3 Hardware Choices: Tethered, Wireless or Datalogger

2. Collect

Assess subjects while walking and standing using 2,288 sensing elements

3. Analyze

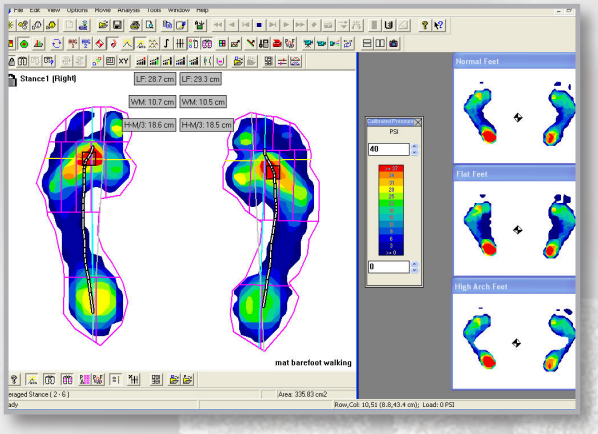


View 2-D or 3-D data; several graphing options to identify high risk areas

307 West First St., South Boston, MA 02127 • 617.464.4500/800.248.3669 • www.tekscan.com

MatScan® Analysis

MatScan Software



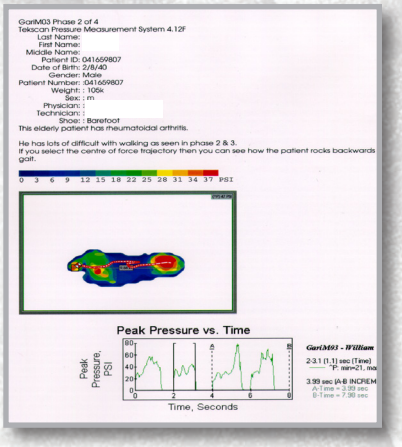
Sensor Specifications	
Sensor Model #	3150 / 3150E
Technology	Resistive
Sensing Area	435.9 mm x 368.8 mm (17.16 in. x 14.52 in.)
# of Sensels	2,288
Pressure Range	125 psi/862 kPa
Floor Mat Height	0.57 cm (0.225 in.)

System Specifications			
Connection	Tethered	Wireless	Datalogger
Scan Speed	up to 100 Hz (*Evolution*) up to 440Hz (*VersaTek*)	up to 109 Hz	up to 440 Hz
Maximum Distance	up to 15 m (50 ft) standard (up to 30.5 m (100 ft) available)	up to 100 m (328 ft)	Unlimited

Analyze data for asymmetries during stance phase, left/right weight-bearing, pressure distribution, and offset of position for center of force.

Print Report

Also, print reports (right) for patient understanding and record keeping.



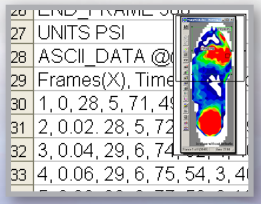
> *Physicians and patients alike have found the [MatScan] to be an invaluable addition to the diagnosis and treatment of foot conditions, and for the pedorthic profession, [MatScan] is a valuable tool that helps to create a more effective orthosis.*
>
> ~ Gus Villarreal, OTC, C.Ped
> Austin, TX

Contact us today for a demonstration!

www.tekscan.com / 800.248.3669

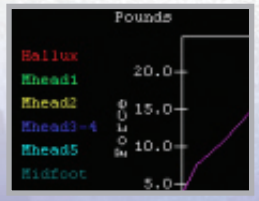
Related Products & Options

Research Software



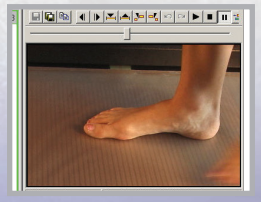
additional graphing capability and ASCII data output

STAM™
(Stance Timing Analysis Module)



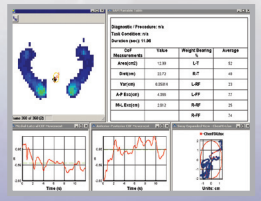
timing data, with respect to segmented foot function during stance, relative to normal function

Video Synchronization



synchronize/play back both video and pressure data simultaneously to study gait patterns

SAM™
(Sway Analysis Module)



assess and document sway and weight bearing distribution

CONFORMat®

measure interface pressures between the buttocks and seat (cushion) or back and backrest (cushion)

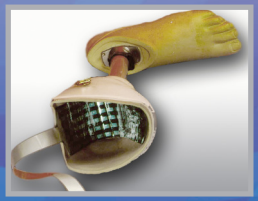
In-Shoe

bipedal in-shoe analysis

Walkway™

larger sensing area for multiple foot steps

F-Socket™



assessment of prosthetic pressures