

DIERS Dynamic foot scan - Pedoscan

The DIERS pedoscan (foot pressure recording and gait analysis system) allows to record and display quickly and precisely the pressure distribution of the human foot while standing or while walking. The parameters measured are the pressure distribution, pressure peaks, and movement asymmetries. The rollover behavior is also recorded to help to diagnose foot malformations or functional limitations of the lower extremity. The precise, high-frequency measurement technology allows to document even rapid movements of the body's centre of pressure and load changes. During the dynamic measurement the walking direction is automatically identified by the software.

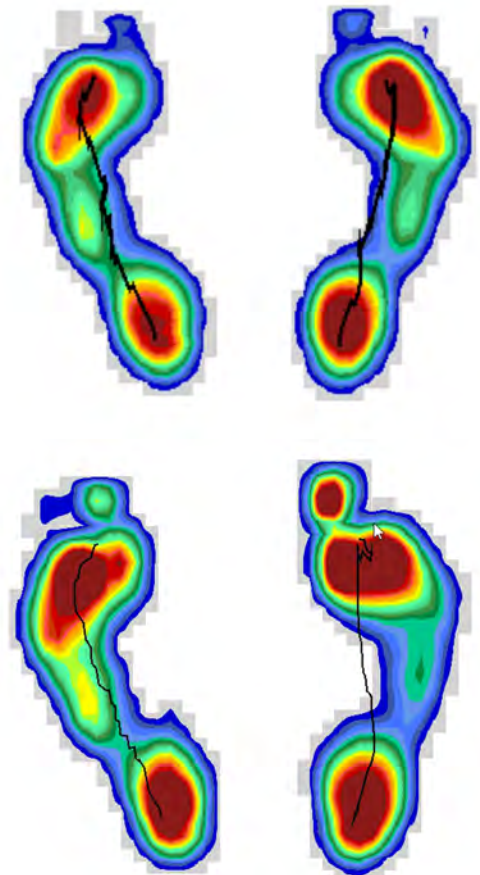


The high-frequency measurement of the body's centre of pressure provides additional information about neurological issues and extends the range of application to (competitive) sports.

The integrated measuring platform is 1.0 m long with 5.376 sensors for an exact capture of the pressure values. Measurement precision is gained and needed due to postural variances of the human body. The treadmill can be used both for static measurements of the foot pressure measurement as well as for the stabilometry.



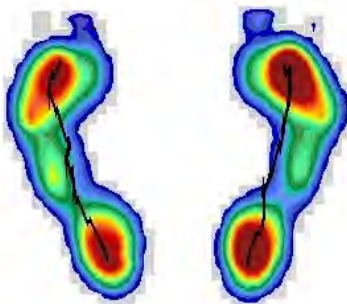
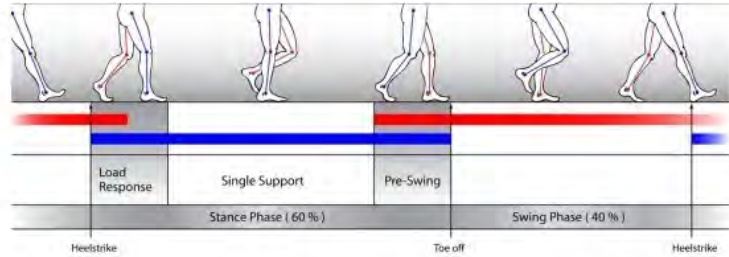
Dynamic Foot Pressure Measurement





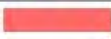



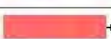




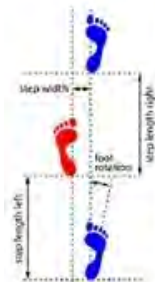
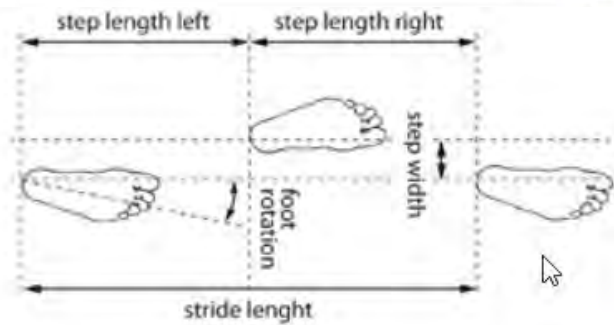
The above two examples shows the over pronation of the right foot. The force reation depicted by the black line curves inwards at the mid foot.

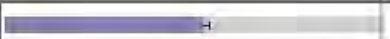



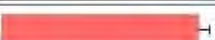

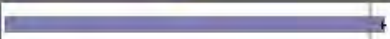





Feet and Spine,
88, Rodney Street,
Liverpool L1 9AR
Tel 0800 7797797
info@feetandspine.com



Stance time [%]	Left	65.9 +/- 3.35	
	Right	63.7 +/- 4.27	
Load response [%]	Left	13.9 +/- 1.82	
	Right	16.7 +/- 1.87	
Single support [%]	Left	36.1 +/- 1.39	
	Right	33.7 +/- 2.52	
Pre-swing [%]	Left	16.9 +/- 1.75	
	Right	14.2 +/- 1.41	
Swing time [%]	Left	34.1 +/- 1.11	
	Right	36.3 +/- 2.29	
Double support [%]		16.6 +/- 2.04	



Stride length [cm]		73.7 +/- 1.99	
Stride time [s]		1.3 +/- 0.05	
Step length [cm]	Left	39.1 +/- 1.63	
	Right	34.6 +/- 1.21	
Step time [s]	Left	0.6 +/- 0.03	
	Right	0.6 +/- 0.04	
Stride width [cm]		10.4 +/- 7.11	
Foot rotation [°]	Left	20.2 +/- 0.13	
	Right	16.5 +/- 0.24	
Cadence		96.0	
Velocity [km/h]		2.0	