innervations

Technical Note

Updated 15th June 2021

InnerBalance – Parameter Calculations – Balance Analysis

The measurement parameters calculated by the InnerBalance software apply to the currently selected section of data or the entire dataset if no subset has been selected.

Parameter	Description
Duration of trial (seconds)	Time period between the start and the end of the currently selected section of data or the entire dataset if no subset has been selected.
Total distance (metres)	Total distance travelled as a path of the centre of pressure.
Average velocity (m/s)	Average velocity of the centre of pressure.
Peak velocity (m/s)	Highest velocity of the centre of pressure.
Total sway (degrees)	Summed angular displacement of the centre of mass.
Average sway velocity (deg/s)	Average velocity of sway angle calculated as total sway divided by duration.
Peak sway velocity (deg/s)	Highest velocity of sway angle.
Mediolateral (ML) total distance (m)	Length of the path of the centre of pressure in the mediolateral (left to right) plane.
Anteroposterior (AP) total distance (m)	Length of the path of the centre of pressure in the anteroposterior (front to back) plane.
Mediolateral (ML) average velocity (m/s)	Average velocity of the path of the centre of pressure in the mediolateral (left to right) plane calculated as ML total distance divided by duration.
Mediolateral (ML) peak velocity (m/s)	Highest velocity of the path of the centre of pressure in the mediolateral (left to right) plane.
Anteroposterior (AP) average velocity (m/s)	Average velocity of the path of the centre of pressure in the anteroposterior (front to back) plane calculated as AP total distance divided by duration.
Anteroposterior (AP) peak velocity (m/s)	Highest velocity of the path of the centre of pressure in the anteroposterior (front to back) plane.
Mediolateral (ML) range (cm)	Difference between the highest ML value and lowest ML value. That is most right minus most left COP measure.
Anteroposterior (AP) range (cm)	Difference between the highest AP value and lowest AP value. That is most forward minus most backward COP measure.
Total excursion area (cm^2)	ML range multiplied by AP range.