NORAXON®

"First in the industry to combine 3D force and pressure metrics!"

Gaitway 3D + myoRESEARCH®

The All-in-One Gait/Running Analysis Solution

3D Force Instrumented Treadmill Combined With:

- *Pressure Distribution*
- *Automated Protocols*
- *Research-Grade Quality*
- *Optional Add-Ons:*
  - ▫ *Multi-Channel EMG*
  - ▫ *High-Speed Video*
  - ▫ *3D Motion*

EMG   3D MOTION   SOFTWARE   **PRESSURE/FORCE**   VIDEO ANALYSIS

Combining Force and Pressure Gives You a New Level of Detail

The integration of pressure and force provides you the sensitivity needed to fully understand loading mechanincs during gait. Important variables related to loading rates and distribution can be analyzed together to provide a comprehensive analysis.

## Force + Pressure + High-Speed Video
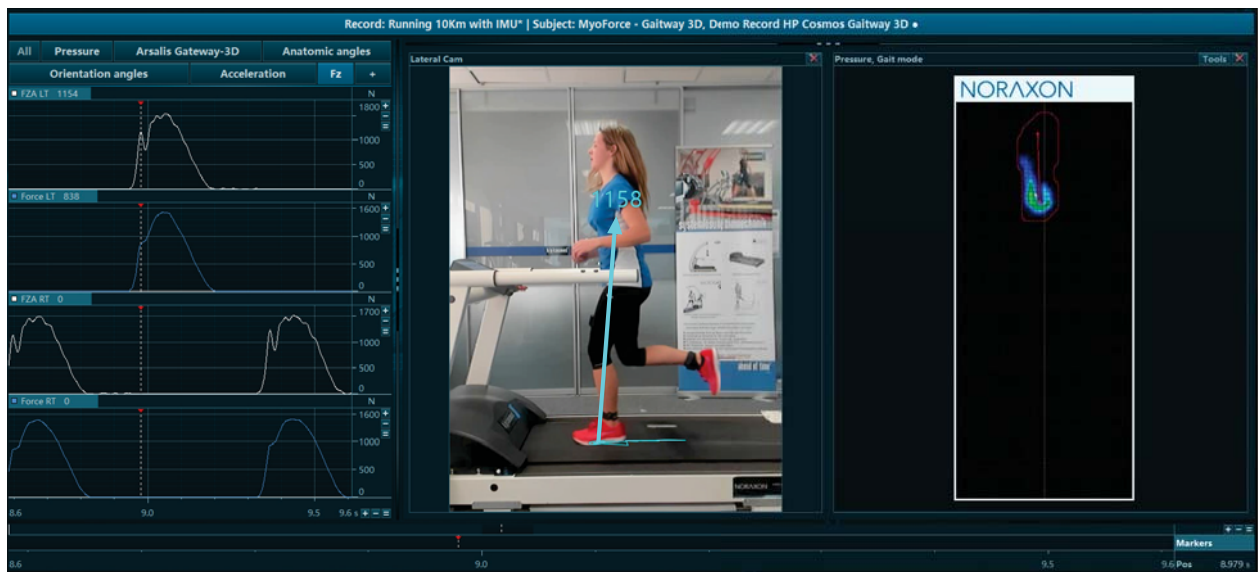
EMG + Pressure + 3D Motion

With myoRESEARCH®

The accompanying software platform, myoRESEARCH®, streamlines the entire data acquision and analysis process. Software features include:

- Automated all-in-one measurement and analysis software
- Interactive record viewer with intuitive playback control

- Exact time synchronization of EMG, high speed video and 3D motion as well as treadmill pressure distribution and 3D forces
- Full suite of signal processing functions
- Customizable reporting system
- Comprehensive export of all raw and calculated data

Comprehensive Gait & Running Analysis Report
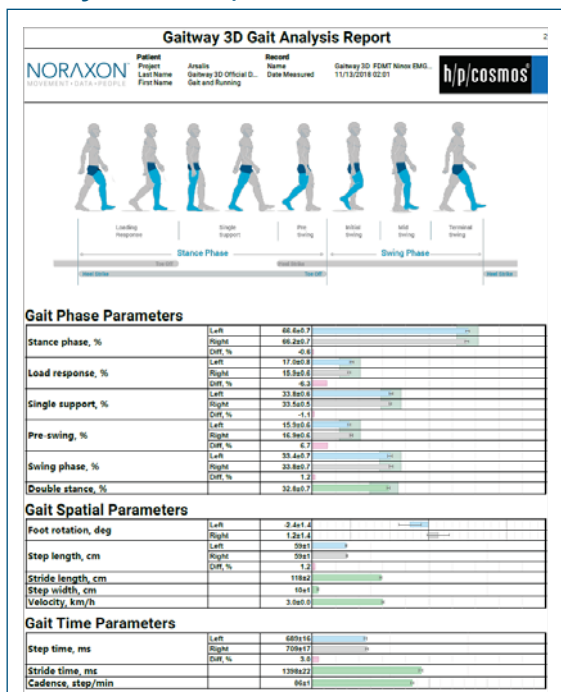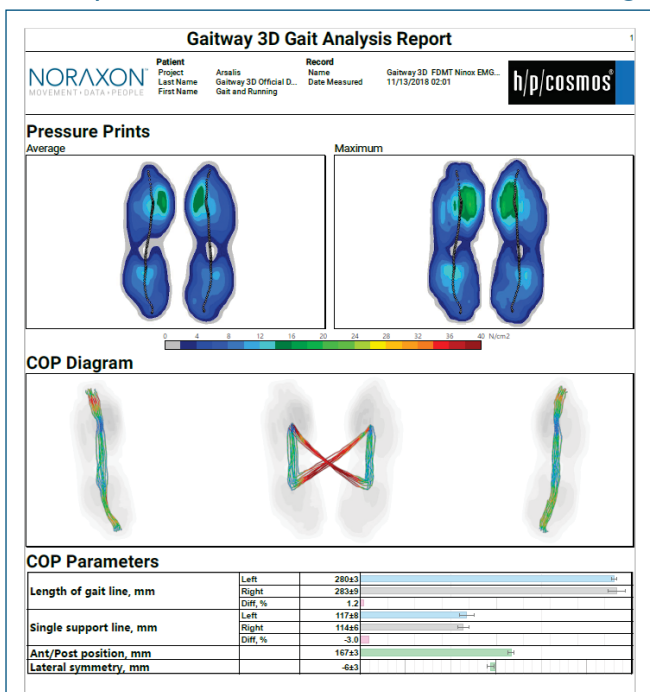
Flexible System Configuration

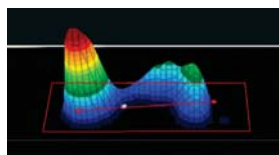Gaitway 3D Treadmill

+
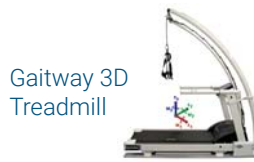
Modular Add-On Components:
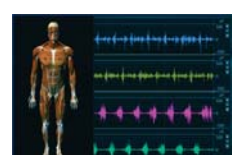

2D Marker Tracking

Force Vector Video Overlay

Pressure Distribution Analysis

3D Kinematics Inertial Sensors

Multi-Channel Surface EMG

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H/P/Cosmos Gaitway 3D Specs

Running surface	L: 150 cm W: 50 cm / L: 170 cm W:65 cm
Speed range	0 - 22.0 km/h or 0 -13.6 mph
Elevation	Optional elevation module 0-20%
Load range on sensors	Fx, Fy, Fz: 10 kN
Overload (sensors)	24 kN
Linearity	Fx, Fy: <0.8 % Fz: <0.2 %
Hysteresis	Fx, Fy: <0.8 % Fz: <0.2 %
Cross-talk	Fz -> Fx, Fy: <2.0 %
Drift	Fx, Fy, Fz: <0.05 N/min
Natural frequency	Fx: 55 Hz Fy, Fz: 65 Hz
Temperature operation	10 ‑ 40°C or 40 ‑ 104°F
Temperature storage	-25 ‑ 40°C or -13 ‑ 104°F
Storage humidity	0 ‑ 95% (non-condensing)
Air pressure	700 ‑ 1060 hPa (max 3000m altitude)
Audible noise	Noise emission LpA <70 dB(A) (63dB) acc. EN957-6
Resolution	Adjustable (12-375 mN/bit)
Measurement range	Adjustable (375‑12000 N)
Sampling rate	1,000 Hz

INTERFACES
- Built-in amplifier
- Ethernet interface
- Analog / digital interface
- Start & stop digital input triggers and digital sync output
- Serial port RS232 for treadmill control via coscom v3 interface

ACCESSORIES
- Safety arch with fall stop
- Detachable handrails
- High-speed upgrade (max. 40 km/h)
- Non-reflective powder coating
- Reverse belt rotation

Certification

Developed with:

www.noraxon.com

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