

The All-in-One Gait/Running Analysis Solution



# 3D Force Instrumented Treadmill Combined With:

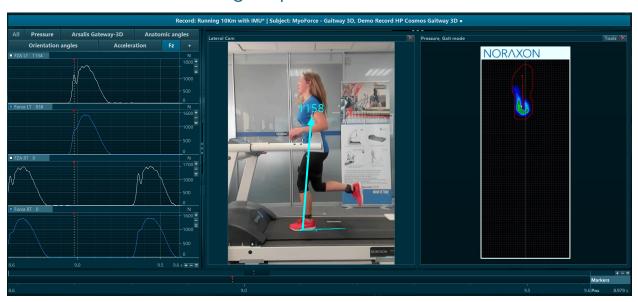
- Pressure Distribution
- Automated Protocols
- Research-Grade Quality
- Optional Add-Ons:
  - Multi-Channel EMG
  - High-Speed Video
  - 3D Motion

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

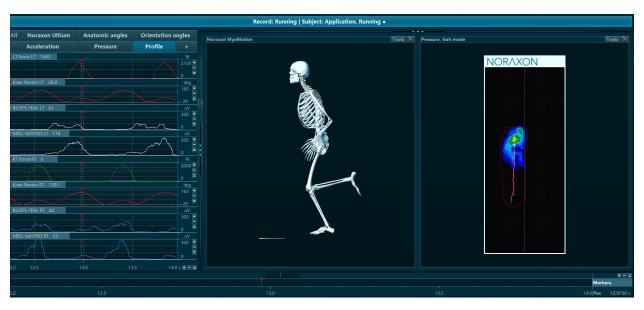
# Combining Force and Pressure Gives You a New Level of Detail

The integration of pressure and force provides you the sensitivity needed to fully understand loading mechanines 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

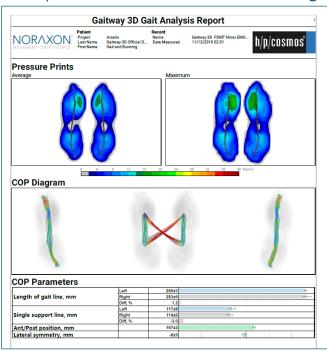


# With myoRESEARCH™

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



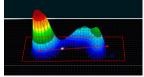
### Modular Add-On Components:



2D Marker Tracking



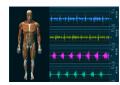
Force Vector Video Overlay



Pressure Distribution Analysis



3D Kinematics Inertial Sensors



Multi-Channel Surface EMG



# 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 <b>-</b> 40°C or -13 <b>-</b> 104°F
Storage humidity	0 <b>-</b> 95% (non-condensing)
Air pressure	700 <b>-</b> 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 <b>-</b> 12000 N)
Sampling rate	1,000 Hz
Measurement range	Adjustable (375 <b>-</b> 12000 N)

#### **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

#### Developed with:





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