The MotionMonitor™ is a trademark of Innovative Sports Training, Inc

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Gait Analysis & Instrumented Treadmills

- Reduce Cost and Space requirements with Bertec’s split belt instrumented treadmill and 3 optical cameras.
- Collect more data in a shorter period of time…each step counts! Particularly helpful for stroke and other patients with fatigue issues.
- Perform real-time data collection with no post-processing using The MotionMonitor’s real-time features.
- Control the belt speed dynamically using The MotionMonitor’s Biofeedback module.
- Define virtual joint centers using Bell, Davis or functional methods or from user defined anatomical landmarks.
- Output all kinematic and kinetic data including joint moments and forces using intuitive drop-down menus.
- Trigger data collection with forceplate impact or foot switches for hands-free collection.
- Normalize data by body weight, height, percentage of gait cycle, and stride length.
- Automatically ensemble average output data using The MotionMonitors Data Reduction features.

the most advanced data acquisition and analysis system in the market place offers precise measurement of human motion for applications in…

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The MotionMonitor base unit shown here with 3 MotionAnalysis Cameras and Bertec’s split belt treadmill. Forceplates under each belt record accurate-low noise force vectors whether walking or running.

In the gait retraining activity on the right, the subject is presented with a target knee flexion angle in red, while their realtime knee angle is displayed by the yellow chasing cursor. When the subject successfully reaches the target, they receive an auditory cue. Throughout the activity, kinematic and kinetic data is captured using the Bertec instrumented treadmill and Vicon Bonita cameras.

Real time data acquisition, analysis, and 3D visualization. Turnkey hardware solutions. Upgradeable as your needs change. Research Design & System Engineering consultation.