Smart Shoe Gait Analysis

Interface Mini™

Industry: CPG

Summary

Customer Challenge

A customer has created a smart shoe that will sensor and monitor a person's gait, or pattern of movement in real-time. Gait analysis monitors performance by athletes, by tracking and studying the human movement. Sensors are needed for the smart shoe in order to gather data on foot movements.

Interface Solution

Interface's LBM Compression Load Button Load Cell can be installed in the sole of the shoe. When connected to a WTS-AM-1E Wireless Strain Bridge Transmitter Module, the movement results is wirelessly transmitted to the customer's PC through the WTS-BS-6 Wireless Telemetry Dongle Base Station. With supplied Log100 software, gait results are measured, monitored, and recorded.

Results

Interface's LBM Compression Load Button Load Cell successfully measured human movements such as balance, stride strength, foot pressure, and posture during the gait analysis.

Materials

- LBM Compression Load Button Load Cell
- WTS-AM-1E Wireless Strain Bridge Transmitter Module
- WTS-BS-6 Wireless Telemetry Dongle Base Station with supplied Log100 software
- Customer PC or Laptop

How It Works

- The LBM Compression Load Button Load Cell can be installed in the sole of the shoe. The LBM is connected to a WTS-AM-1E Wireless Strain Bridge Transmitter Module.
- 2. An athlete wears the smart shoe containing the load cell. A study is conducted on the athlete's movements such as balance, stride, strength, foot pressure, and posture.
- 3. Data results are sent wirelessly to the customer's PC through the WTS-BS-6 Wireless Telemetry Dongle Base Station with supplied Log100 software.

