Friction Testing Multi-Axis

Industry: Industrial Automation, Test and Measurement

Summary

Customer Challenge

A testing laboratory was looking to replace An Interface Model 3A60 3-Axis load two single axis load cells used in their friction testing machine with one sensor that could measure force on the x, y, and z axis simultaneously.

Interface Solution

cell was installed on their existing machine with an Interface BSC4D-USB Multi-Channel PC Interface hooked directly to a PC laptop to monitor and log the data in real time.

Results

The testing laboratory was able to simplify their sensor set-up and improve their data collection, creating more value for their end customer.

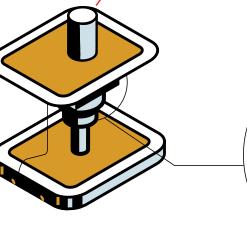
Materials

- 3A60 3-Axis Load Cell
- BSC4D-USB Multi-Channel PC Interface
- Module which includes BlueDAQ display, graphing, and logging software.
- Appropriate cabling.

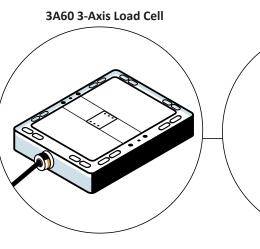
Friction Testing Machine

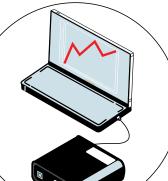
How It Works

- The 3-Axis load cell is installed between the arm of the 1. friction testing machine and the test specimen.
- 2. The BSC4D is installed between the 3-Axis load cell and the PC laptop.
- 3. Weights are placed on the top of the arm to create a down force.
- 4. The machine arm drags the test specimen across the material resting on the bed.
- 5. The 3-Axis load cell measures the forward/back force (x), side to side force (y) and down force (z) being applied to the test specimen.
- 6. The sensor's output is fed to the BSC4D and to the PC laptop where it is displayed using the included software.



Weight





Laptop

BSC4D-USB Multi-Channel PC Interface

