Feed Roller System

Load Cell

Industry: IoT

Summary

Customer Challenge

A customer has a feed roller system, and needs to monitor the forces of both ends of the rollers, in order to maintain a constant straight feed. They would also prefer a wireless system.

Interface Solution

Interface suggests installing Pillow Block Load Beam at both ends of the bottom roller to measure the forces being applied. The forces are measured when connected to WTS-AM-1E Wireless Strain Bridge Transmitter Module. The data is then transmitted wirelessly to the WTS-BS-6 Wireless Telemetry Dongle Base Station and the WTS-HK-S Next-Generation Wireless Handheld, where data can be displayed, graphed, and logged on the customer's PC or laptop.

Results

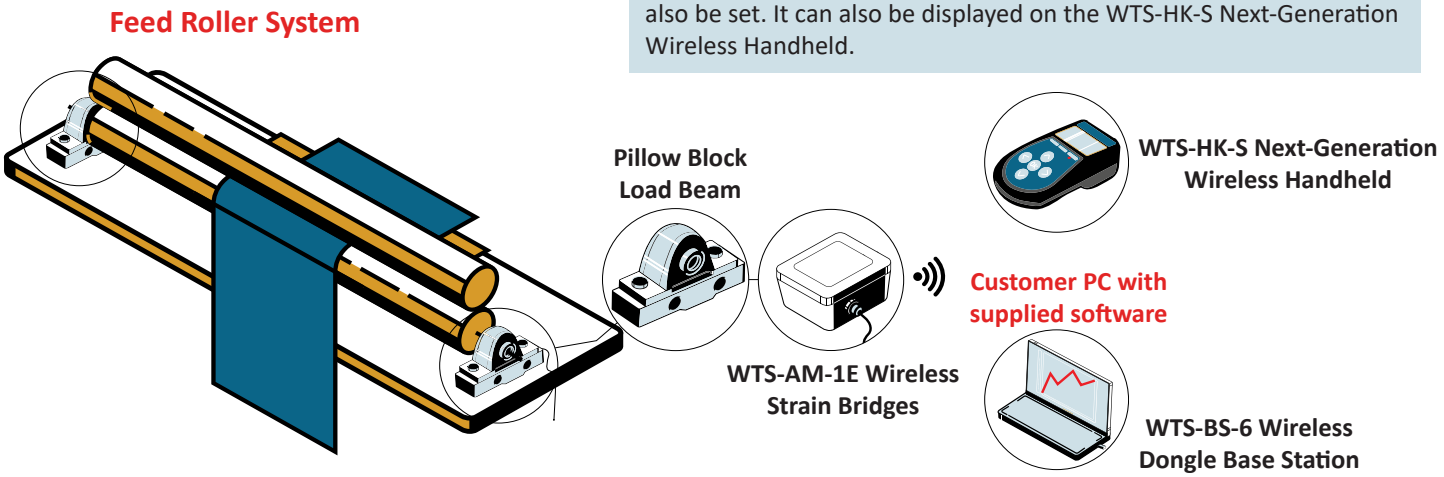
The Pillow Block Load Beams installed at the bottom roller was able to measure and monitor the forces to maintain the straight feed by the rollers.

Materials

- Two Pillow Block Load Beams
- Two WTS-AM-1E Wireless Strain Bridge Transmitter Module
- WTS-BS-6 Wireless Telemetry Dongle Base Station
- WTS-HK-S Next-Generation Wireless Handheld
- Log100 Software
- Customer PC or Laptop

How It Works

1. Two Pillow Block Load Beams are installed at the two ends of the bottom roller, and connected to two WTS-AM-1E Wireless Strain Bridge Transmitter Module.
2. As a material is fed into the roller system, the Pillow Block Load Beams measures the forces of the roller system to detect any imbalances in the roller system.
3. The data results are wirelessly transmitted from the WTS-AM-1E Wireless Strain Bridge Transmitter Module to the WTS-BS-6 Wireless Telemetry Dongle Base Station. Results can be displayed, graphed, and logged on the customer's PC with Log100 software, where alarms can also be set. It can also be displayed on the WTS-HK-S Next-Generation Wireless Handheld.



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