

Bolt Tension Monitoring

Interface Mini™

Industry: OEM

Summary

Customer Challenge

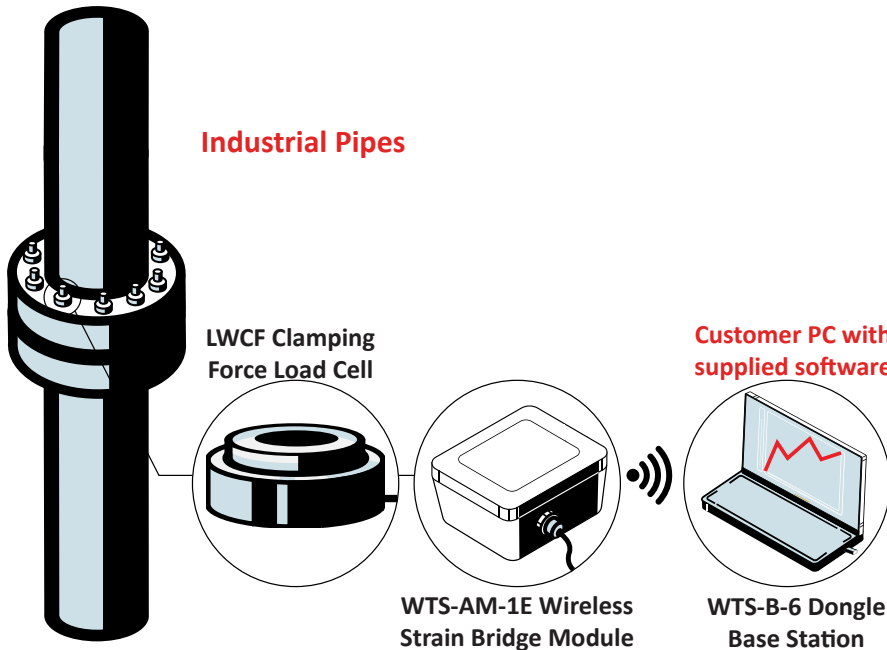
A customer wants to monitor the tension of the bolts that are used on their industrial large metal pipes.

Interface Solution

Interface suggests installing multiple LWCF Clamping Force Load Cells, each connected to WTS-AM-1E Wireless Strain Bridge Transmitter Modules. The load cells are installed under the tightened bolts on the pipes. The load cells will measure the compression forces from the bolts, and the real-time results are transmitted wirelessly from the WTS-AM-1E's to the WTS-BS-6 Wireless Telemetry Dongle Base Station when connected to the customer's PC. Real-time results from the LWCF's are displayed using provided Log100 Software.

Results

Interface's load cell monitoring system successfully monitors the compression forces of the bolts in real time.



How It Works

1. Multiple LWCF Clamping Force Load Cells are installed under the bolts attached to the pipes.
2. Each LWCF is connected to a WTS-AM-1E Wireless Strain Bridge Transmitter Module.
3. The LWCF's measure the compression forces from the tightened tie-rod, and the results are transmitted from the WTS-AM-1E to the WTS-BS-6 Wireless Telemetry Dongle Base Station connected to the customer's PC. Each load cell can be monitored in real time using Log100 software.

Materials

- LWCF Clamping Force Load Cells
- WTS-AM-1E Wireless Strain Bridge Transmitter Modules
- WTS-BS-6 Wireless Telemetry Dongle Base Station
- Log100 Software
- Customer PC or Laptop