

Quarrying Conveyor Belt Scale

S-Type

Industry: Natural Resources

Summary

Customer Challenge

A quarrying belt scale is used to measure the flow rate and monitor the total quantity of material transported on conveyor belts in quarrying and mining operations. Materials such as gravel, sand, or minerals is processed into stockpiling areas. Force sensors need to be implemented into the belt to be monitored in real-time.

Interface Solution

Interface suggests installing multiple SSMF Fatigue-Rated S-Type Load Cells within the conveyor belt. The SSMF is the perfect load cell for easy replacements without disrupting the alignment of the conveyor belt. The SSMF measures and monitors the weight of the materials being transported. The results will be captured by the WTS-AM-1E and transmitted to the customer's PC using the WTS-BS-6 Wireless Telemetry Dongle Base Station.

Results

The customer was able to monitor and measure the material being transported on the quarrying conveyor belt using Interface's load cells.

Materials

- SSMF Fatigue-Rated S-Type Load Cells
- WTS-AM-1E Wireless Strain Bridge Transmitter Modules with Log100 software
- WTS-BS-6 Wireless Telemetry Dongle Base Station
- Customer PC or Laptop

How It Works

1. Multiple SSMF Fatigue-Rated S-Type Load Cells are installed within the quarrying belt, connected to WTS-AM-1E Wireless Strain Bridge Transmitter Modules.
2. The load cells capture the forces of the quarrying materials being transported.
3. The data is wirelessly transmitted to the customer's PC when connected to the WTS-BS-6 Wireless Telemetry Dongle Base Station. Data can be displayed, logged, and graphed with supplied Log100 software.

