

Crane Block Safety Check Load Pin

Industry: Lifting

Summary

Customer Challenge

A customer wants a system to detect if their crane block can lift heavy loads securely, in order to keep working conditions and personnel safe. If lifting capacities are exceeded, the customer wants a system to alarm them in real-time.

Interface Solution

Interface's WTSLP Wireless Stainless Steel Load Pin can replace the existing load bearing pin in the crane block in order to measure the force being applied by the heavy load. Data will be transmitted and displayed through both the WTS-BS-4 USB Base Station (when paired with the customer's supplied PC computer or laptop) and the WTS-BS-1-HA Wireless Handheld for real-time results. The WTS-RM1 Wireless Relay Output Receiver Module will also trigger an alarm when maximum capacity has been reached.

Results

The WTSLP Wireless Stainless Steel Load Pin, combined with the WTS products, was able to measure and determine force applied the moment a heavy load is lifted. The results were transmitted wirelessly, and ensured the customer whether or not the crane block was safely operational during production.

Materials

- WTSLP Wireless Stainless Steel Load Pin
- WTS-RM1 Wireless Relay Output Receiver Module
- WTS-BS-1-HA Wireless Handheld Display for Multiple Transmitters
- WTS-BS-4 USB Industrial Base Station
- WTS Toolkit Software & Log100 Software Included
- Customer PC or Laptop

How It Works

1. WTSLP Wireless Stainless Steel Load Pin is installed, replacing the normal load bearing pin on the block of the crane. A heavy load is added to the end of the block.
2. The WTS-RM1 Wireless Relay Output Receiver Module captures the data transmitted from the WTSLP Wireless Stainless Steel Load Pin and uses this to trigger and alarm when the setpoint is reached. Simultaneously, these transmitted force readings are displayed in real-time to the customer through the WTS-BS-1-HA Wireless Handheld Display or the WTS-BS-4 USB Base Station (connected to the customer's PC computer or laptop).

