

Paper Press Machine Load Cell

Industry: Manufacturing, CPG

Summary

Customer Challenge

In the press section of a paper press machine, large rollers compress the paper web to remove water and form a consistent sheet. Maintaining the correct roll force is critical. The wrong amount of force can lead to poor sheet formation, while excessive force can crush fibers, cause sheet breaks, or damage rolls and bearings. Without accurate force measurement at the roll supports, operators cannot reliably control or balance the applied load.

Interface Solution

Interface suggested installing PBLC2 Pillow Block Load Bearing Load Cells, a direct replacement for standard pillow block bearings supporting the press rollers. This sensor measures the force applied through the roller shaft in real time. Components from overload conditions. The data is then transmitted wirelessly to the WTS-BS-6 Wireless Telemetry Dongle Base Station and the WTS-BS-1-HA Wireless Handheld Display for multiple transmitters, where data can be displayed, graphed, and logged on the customer's PC or laptop.

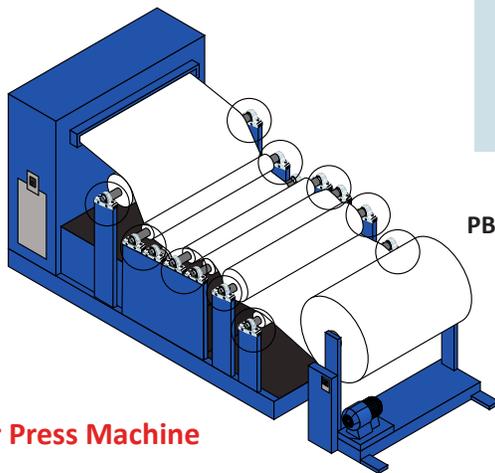
Results

Operators can maintain stable, controlled compression during paper press operation. They were able to monitor and limit excessive loads, prevent premature wear or damage to rolls and bearings, all while improving overall process stability.

Materials

- PBLC2 Pillow Block Load Cells
- WTS-AM-1E Wireless Strain Bridge Transmitter Modules
- WTS-BS-6 Wireless Telemetry Dongle Base Station
- WTS-BS-1-HA Wireless Handheld Display for multiple transmitters
- Log100 Software
- Customer PC or Laptop

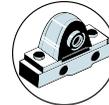
**Customer must supply their own pillow block bearing*



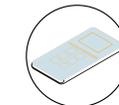
How It Works

1. PBL2C Pillow Block Load Cells are installed to support the press roller shafts, and connected to two WTS-AM-1E Wireless Strain Bridge Transmitter Modules.
2. As a paper is fed into the roller system, the PBL2C Pillow Block Load Cells 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-BS-1-HA Wireless Handheld Display for multiple transmitters.

PBLC2 Pillow Block Load Cells

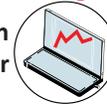


WTS-AM-1E Strain Bridge Transmitter Module



WTS-BS-1-HA Handheld Display

Customer PC with supplied Log100 Software



WTS-BS-6 Dongle Base Station