Application – Thickness Measurement of Drywall

The Application
Wet gypsum is run through a press roll and onto a conveyor belt. The press roll regulates the thickness of the drywall. However, measurements of the material on the conveyor belt are made to ensure the quality of the manufactured board.

The Problem
The tolerance of the drywall is plus or minus 1 mm. In most facilities, the production line is stopped occasionally and manual measurements of the board are made. The manual measurement is time-consuming and shutting down the line reduces output.

The Solution
AMETEK Drexelbrook installed an RF continuous transmitter using a sensing element with a 14-inch x 14-inch plate. This plate allows the transmitter to make a non-contact proximity measurement. The thickness of the drywall is continuously monitored and no longer requires stopping the conveyor.

Benefits
- Continuous monitoring of the drywall thickness ensures quality and increases production.
- HART smart RF transmitter for easy calibration from anywhere in the loop.
- No routine maintenance required. Install it and forget it.

Other Solutions:
- Gypsum silo’s
- Waste Sump
- Gypsum slurries
- Make-up Water
- Fuel Oil

Typical Uses:
- Continuous Level
- Inventory Management
- Point Level
- Overfill Protection
- Waste Management
- Regulatory Compliance

Proximity Measurement of Drywall Thickness

Forming Roller

Transmitter 4 to 20mA output

1 inch