Interface level transmitter with PLC

APPLICATION A128

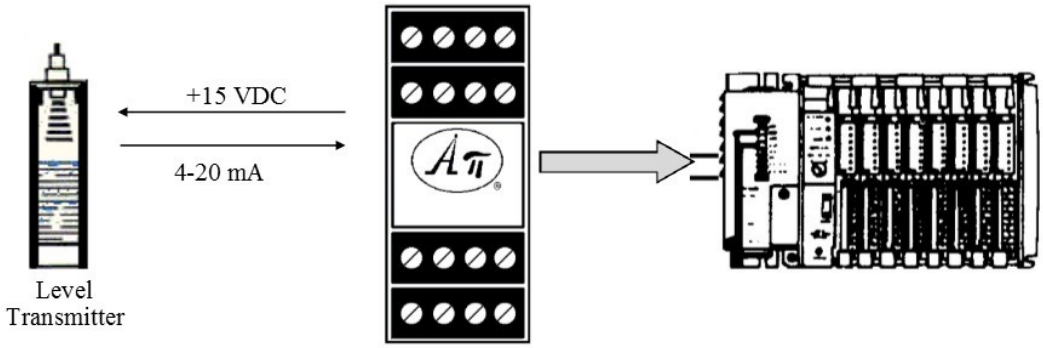
Type of Company: Manufacturer, Cardboard

Location: Connecticut

Because corrugated cardboard is such a versatile packaging material, millions of tons are used each year to protect and display products. From the paper mill, rolls of kraft paper are transported to a corrugating, or converting, plant. At the plant, three layers of kraft paper are crimped and glued to form corrugated cardboard, which is then processed to make boxes. This customer uses a Bindicator Level transmitter and interfaces it to a Rockwell Automation PLC. They had been using an interface device that was no longer made, and the engineer had to replace it with a generic loop-powered isolator.

The Engineering Issue

- The replacement isolator was powered by the PLC's +24 VDC power supply but it caused issues for both the power supply and the PLC.
- The engineer needed a signal isolator to both power the transmitter and to interface with the PLC input card.



The engineer used an APD 4380 to interface the sensor to the PLC. The Bindicator Level transmitter was powered from the APD internal +15 VDC input signal power supply (sourcing input) and the PLC was connected as a current sinking output from the APD.

Problem. Solved.

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