Monitor slurry pressure in pipe
APPLICATION C215

Type of Company: Manufacturer, Pet Food
Location: Unknown

Pet food is formulated for domesticated animals. Wet pet food (canned food) generally consists of meat, meat byproducts, cereals, grain, vitamins, and minerals. The meat products intended for canned food must be delivered fresh and processed within three days. The manufacturing process entails grinding and cooking the meat and meat byproducts in a large kettle. After grinding and cooking the meat, other ingredients are added and well mixed. The food mixture (an abrasive slurry) is then pumped through pipes out of the kettle and into the can-filling machine. The machine dispenses the mixture into cans or pouches for delivery.

The Engineering Issue

- The engineer has a requirement to monitor the slurry flow from the kettle to the can filling machine and in the event of a blockage send an alarm to the PLC.
- The slurry is highly viscous so it may clog the pressure port of a gauge and a sanitary cleanliness level is critical.

The engineer used a Cecomp DSGA4 digital sanitary pressure gauge with alarms. The gauge is set up so that if both LEDs on the front face are green, the slurry is flowing properly. The operator can use the LCD display to verify proper operating pressure. The relay operates to send a signal to the PLC so that the pumps can be shut down if there is a blockage in the slurry line.

Problem. Solved.