Application Note

High Pressure Measurement in Food Processing



Equipment in the food processing industries generates high pressures. These pressures cause spikes, high temperatures and vibrations, which are very hard on controlling instruments. Viatran has developed a method to accurately measure pressure while protecting the instrumentation. Viatran's 25 Series Isolator is an ideal solution for food processing applications. Existing T-mounted transmitters lead to several difficulties in measuring high pressures. T-mounts have recesses and dead spots where process media accumulates. This requires more flushes and cleaning solvents for clean in place (CIP) systems. With some T-mount process slurrys, complete disassembling may be required.

Viatran's solution to the T-mount system's problem is to combine the 25 Series Pressure Isolator and Model 571 Pressure Transmitter. The Isolator has a smooth tubular stainless steel lining surrounded by stainless steel piping. The lining acts as an extremely durable diaphragm. A fill fluid is used between the lining and outer pipe which hydraulically couples pressure to the 571 pressure transmitter. The sensor's all-welded construction makes the 571 airtight, watertight and ideal for corrosive environments, while the O-Ring free design ensures reliability.

Viatran's 25 Series Pressure Isolator allows pressure measurement without recesses or dead spots in process piping. Use of an isolator allows for easy system flushing using fewer flushes and less cleaning solvents during CIP. The 25 Series protects the 571 pressure transmitter from high temperatures. This extends the effective life of the 571 by insulating its electronics from process temperatures. Viatran's 25 Series Pressure Isolator and Model 571 Pressure Transmitter are dependable and accurate. Viatran has provided the ideal solution for high-pressure flow measurement in the food processing industry.

Call Viatran today to discuss how we can help you with your pressure measurement needs.



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