

Fast Response Differential Pressure Measurement

Viatran's 274 Series are rugged, all stainless steel differential pressure transmitters, featuring variable capacitance technology and a hydraulic stop mechanism for overpressure protection. The standard model is ideal for applications that demand accurate measurements at very low pressures.

A nuclear power company designed a dedicated system to monitor sudden changes in the steam pressure from the reactor. This system is part of a safety mechanism that requires a transmitter response time of less than 20 mSec. However, commercially available transmitter products have a rise time of about 200 mSec.

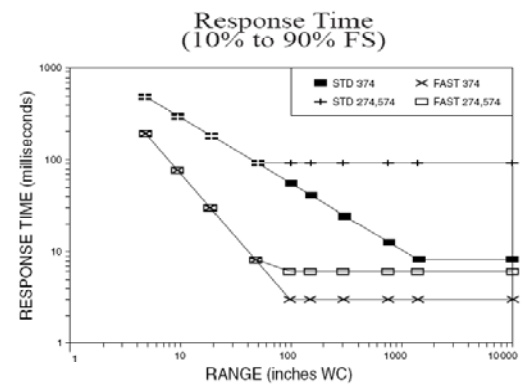
Using Finite Element Analysis (FEA) to predict the behavior of a modified Model 374, Viatran was able to anticipate performance changes and successfully develop a fast response DP transmitter.

The graph demonstrates the time response curve resulting from the modifications made to the sensor and electronics. As illustrated, response time is a function of the sensor's pressure range.

Response times, which range from 500 mSec to 10 mSec on standard 374s, were reduced to 3 mSec for most ranges.

Whether your application is for steam generators, destructive testing or high speed leak testing, our differential pressure transmitters will provide you with accuracy and dependability.

Viatran's service and technological capabilities enable us to provide our customers with solutions to a wide range of pressure measurement problems.



Viatran's 274
Pressure
Transmitter