



NATURAL GAS PIPELINE MONITORING

PRODUCT: Model 209

APPLICATION DETAILS:

Natural gas pipeline monitoring handles gas distribution encompassing monitoring, alarming, data recording and valve control management. These can be configured with pressure transducers for the particular application. Within the panel there is a custom designed high efficiency solar charging station with charge regulation to maintain a sufficient charge of the on board battery.

CUSTOMER PROBLEM:

Old system for recording data was manual, slow, and costly to capture

The previous customer's design incorporated a strip-chart recorder for monitoring the pressure of the natural gas inside a transmission and distribution grid. This was costly from a maintenance and consumables front (labor, ink, paper). These modules are located in remote areas, sometimes underneath the ground in cement enclosures. Gas companies can have thousands of enclosures to service, resulting in exorbitant maintenance fees.

SETRA SOLUTION:

Setra was able to provide a pressure transducer that is compatible with natural gas that converts the gas pressure to an analog output signal. This signal is then fed into the controller and used to monitor the flow of natural gas throughout the distributor cycle.

SETRA STRENGTHS

- Wide Available Pressure Range
- Small Form Factor
- High Price-to-Performance Ratio
- High Reliability
- 17-4 Stainless Steel Wetted Components



WHY SETRA WON:

Provided higher performance solution which saved time and money

The customer's product solutions for the Natural Gas Transmission Distribution Industry help increase transmission distribution efficiency and maintain system integrity by providing real-time data, field instrument operation status, remote control and critical alarms to system operators. The customer was looking for reliable pressure transducers for the application with the following ranges: 0-30" W.C. (0-1 PSIG), 0-200 PSIG, 0-250 PSIG and 0-3000 PSIG. The customer chose Setra due to the favorable price-to-performance ratio that the 209 provides and because Setra developed a custom 209 range that met their 0-30" W.C. requirements.

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GAS CONTROL MANIFOLD SYSTEMS

PRODUCT: Model 209

APPLICATION DETAILS:

The customer is a leading manufacturer of gas control manifold systems, located in Denton, TX. Their fully automatic manifold is designed for demanding applications, where monitoring gas pressure loss and cylinder level is critical for their customers. When their manifold system detects a gas cylinder is low, it automatically switches over to a secondary cylinder. The manifold system has an automatic leak detection feature, which combats sudden losses of pressure in the magnitude of 25%, based on user set points.

CUSTOMER PROBLEM:

Space limitation and need for high accuracy

The customer serves a demanding customer base in the specialty gas, medical, and industrial markets. These customers require compact, reliable, and accurate manifold system to support their processes. These cylinders provide the gas for manufacturing processes and can also help direct necessary medical gas to a patient room. In either case, there's unacceptable and potentially dangerous downtime if a customer were to utilize a manual process to replenish gas.

SETRA SOLUTION:

Setra provided the customer with the Model 209 in order to monitor the inlet pressure to their gas control manifold systems. When the primary tank falls below set point the manifold system reads the Model 209's output and sends a signal to a relay that automatically switches over to the secondary tank. The Model 209 is also used within the system to detect leaks between the manifold and the gas cylinder. This allows the system to alert the user that a leak is present, while it switches over to the secondary cylinder.



WHY SETRA WON:

Provided a high quality and reliable sensor

The customer selected the Setra Model 209 pressure transducer due to its high accuracy of $\pm 0.25\%$ FS, small size to fit in all of their cabinets, and Setra's reputation as a manufacturer of quality products. The Model 209 provided them the necessary performance to automate their new manifold system and to add value for their customer.

SETRA STRENGTHS

- $\pm 0.25\%$ FS Accuracy
- Small Footprint
- 17-4 PH Stainless Steel Offers Compatibility With a Wide Range of Gases and Liquids
- Long-Term Stability of $\pm 0.5\%$ FS/YR