



Gas Detection Solutions For Life



Applications Brief

March 10, 2011

COMPRESSOR STATION MONITORING

Pumping Stations Require Fixed Detection for LEL

There are many thousands of gas compressor stations that present the constant potential hazard of accumulating combustible gases.



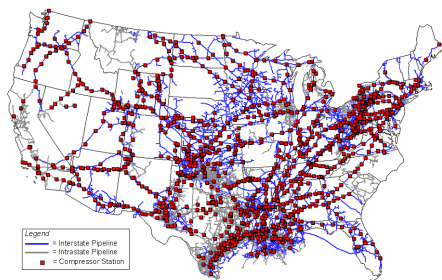
Application Description

As natural gas is moved through transmission pipelines from its source to markets in other parts of the country, the pressure needs to be boosted periodically. This typically occurs every 50 - 75 miles. At these intervals, gas arrives at stations where the gas is re-pressurized by a compressor. These facilities are referred to as compressor stations. Each of these stations has applications for gas detection and RKI Instruments has products that are ideally suited to these requirements.

Facility Types

There are basically two types of compressor stations: The large compressor station which houses many compressors inside a (usually metal) building which is often open on both ends and has an air gap between the building and the slab.

The other is skid mounted with one compressor on a slab and may be open or be covered with a metal carport like cover. The open air compressors seldom have onsite gas detection.



Who to Call On

Facilities: Transmission and distribution gas pipeline companies.

People: Operations Engineer, Instruments Engineer or Compressor Maintenance Supervisor. These people are generally located at a corporate or regional office or at the station itself. For prospecting purposes, stop by the station and ask who is responsible for their fixed gas detection instrumentation. Compressor stations can be found on the company web site under "assets map".

RKI's Solution

Compressor stations generally consist of a small hut that houses the compressor as well as various gauges, valves, flanges etc. which can be sources of potential leaks.

Stationary sensors for the detection of combustible gases are necessary to be placed directly above the compressor. The compressor generates a significant amount of heat and the point of detection can easily reach 140 degrees Fahrenheit or more. Our M2 is especially well suited for this. The sensor can be mounted remotely from the transmitter and be installed directly above the compressor. The transmitter itself is mounted at location convenient to the operator- typically on a wall at eye level. A calibration cup is often mounted permanently to the sensor and tubing is run down next to the sensor head. In this manner, a calibration can be completed easily and safely while maintaining the ideal placement of the sensor itself.

