

GAS ANALYSIS IN NATURAL GAS MARKET

Midstream gas sampling at Compressor Stations and Natural Gas Processing Plants

Application

In the Natural Gas market, a gas chromatograph is used to determine the total gas composition and BTU value of the gas. This is important to know as natural gas is bought/sold from one company to another, often in Midstream. Analysis is required to ensure the quality of the gas being purchased.

The calibration gases for a gas chromatograph must be kept above their hydrocarbon dewpoint or else it may cause stratification within the gas cylinder and cause erroneous measurements. For Natural Gas, the target is to keep the temperature similar to the temperature as the gas chromatograph oven or 120°F (49°C).

Solution

Gas Cylinder Warmers provide the heat necessary to accomplish this. The easy-to-install, plug-and-play BriskHeat cylinder warmers fit snugly around the cylinder to maintain a warm temperature of the contents. This ensures that the gas can be efficiently warmed, and the mixture remains homogeneous. Built-in insulation minimizes heat loss to increase thermal efficiency. A self-regulating technology heating element ensures that the cylinder will not overheat and maintains an optimal operating temperature. BriskHeat gas cylinder warmers ensure the quality of the gas sample used for calibration, resulting in accurate measurements. Ordinary and Hazardous-area rated models are available.

In addition to warming gas cylinders, sample gas lines should also be heated to prevent condensation. Self-regulating cable should be wrapped tightly around pipes or tubing to prevent any vapors from condensing in the sample lines. For energy efficiency, Insul-lock foam insulators can be used.

Industries

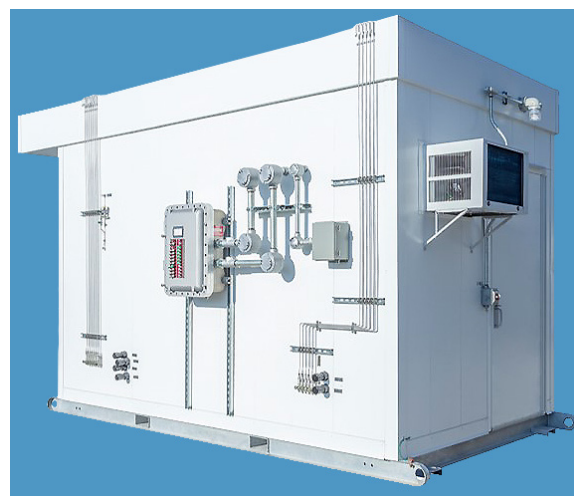
Analytical Instrumentation/Laboratory
Gas Handling
Gas & Oil

Types of Users

Natural Gas Measurement Technicians
Natural Gas Field Technicians
Area/Site Managers – Oversees Facilities like Compressor Stations
Plant Managers at Natural Gas Processing Plants
Engineers at Natural Gas Processing Plants



Analyzer Shelter with Gas Cylinder Warmer in use



Example of an outside of the Analyzer Shelter



HCW Hazardous-Area Rated Gas Cylinder Warmer



Small Gas Analyzer Enclosure with Gas Cylinder Warmer in use