



Mining



Oil and Gas



Power and Utility



Rotating Equipment



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Water & Wastewater

NATURAL GAS ANALYSIS SHELTER

ON SITE ANALYSIS

On-site natural gas chromatograph (NGC) shelters can be used where precise and continuous monitoring of selected components in gaseous stream are required. Common applications include monitoring, product quality or process control, and pipeline integrity.



Applications such as these require a natural gas sample to be extracted from a flowing pipeline, transported to the analyzer, processed for particle removal and phase integrity, and injected onto the chromatographic columns for separation and peak detection.

BENEFITS



Winn-Marion provides a customizable, live gas analysis system where profits, quality of analysis, short analysis time and accurate historical data reporting are of the utmost importance. A heated tubing bundle transports the gas from the sampling point to the shelter where the sample is analyzed. Live data can then be imported into a flow computer for pipeline custody transfer purposes. Options to determine and export chemical composition or gross heating values of gas include:

- AGA 10 Velocity of Sound • Sample probe
- H₂S measurement • 24 hour temperature testing
- C7+ & C9+ analysis

COMPONENTS

All components of the analysis shelter are Class I Div I rated. Shelters are assembled at Winn-Marion's fabrication facility specific to customer requirements.

Application Details:

- ABB NGC 8206
- Explosion-proof catalytic heater
Adjustable thermostat
- Thermon heated tubing bundle
- Explosion-proof junction box
- Helium carrier gas bottle
- Calibration gas bottle
- Sample conditioning module
- Up to four (4) sample streams

CHROMATOGRAPH FEATURES

The NGC 8206 analyzes each sample utilizing established chromatographic techniques. Resulting information consists of mole percent values for the following:

"Air" (Contains N₂, Ar, CO and O₂ but not CO₂)

C1 C2 C3 IC4 NC4

NeoC5 IC5 NC5 C6+

The columns are back flushed so that the NGC measures a C6+ peak. Users may input the results of a comprehensive lab analysis that reflects the split or ratio of C6 through C10 components that can be used in subsequent analysis and energy calculations. A C9+ unit is also available.

Standard features include:

- Btu/CV (Heating) value
- Three security levels
- AGA 8 gas compressibility calculations
- Five (5) minute analysis time
- Alarms and events date & time stamped in log
- Real relative density (Specific Gravity)
- Low utility usage Power & carrier gas
- Automatic calibration



**Winn-Marion
Companies**

Denver, CO – (303) 778-6767

Salt Lake City, UT – (801) 676-0155

Phoenix, AZ – (480) 968-9344

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Roosevelt, UT – (435) 725-0082

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SALES



Winn-Marion Barber, LLC



CONTROLS



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Generator Control - Start/Stop Sequencing • Load Control • Remote Monitoring • Protection Systems

Turnkey Design, Installation and Commissioning of All

