



Mining



Oil and Gas



Power and Utility



Rotating Equipment



Semiconductor



Water & Wastewater

OXYGEN ANALYZER & SHUT IN

OXYGEN MEASUREMENT

High oxygen levels in natural gas are often indicative of a leak in the production line. Oxygen, combined with the moisture inherent in the gas stream, creates a dangerous corrosion hazard in the gatherers high-pressure system. Therefore, when gathering companies detect a high oxygen reading they will shut-in a well to avoid these potential hazards. When this happens, the downtime before the well can be brought on-line may be days, resulting in great loss of production and income. With Winn-Marion's oxygen analyzer and automatic shut-in system, producers can monitor their wells and ensure downtime is kept to a minimum.



SYSTEM DESCRIPTION



Winn-Marion provides turnkey supply and installation of an oxygen analyzer and "slam-valve" package. When the oxygen level reaches a set point (in parts per million or percent) a pulse is sent to the valve to slam it shut. The analyzer is oxygen specific, providing customers with the fastest, simplest calibration available. It is not affected by many of the outside elements such as the temperature shirts that can alter the performance of other analyzers.

low power temperature controlled heater is available and allows for an expanded temperature range of -4° to 122°F without an additional enclosure or wiring. Installation or replacement of the oxygen sensor is quick and easy. Front panel access allows for replacement without tools or the need to remove any sensitive components. This applies in either Class I, Division 1 Groups C,D, area classifications, allowing for a simple straightforward installation.

ANALYZER FEATURES

Winn-Marion uses All's analyzer for complete sample handling with an advanced galvanic trace PPM oxygen sensor. The block contains a series of drilled intersecting gas passages and mounted directly on it are: a custom designed flow control valve, 3-way selector valve (for sample/span/shut off control), flow meter and 3 gas connection fittings. All components are an integral part of the cellblock, eliminating the piecing together of several lengths of tubing between compression fittings and potential leak paths.

Analyzer Features

- 10 user selectable output ranges
- 2 fully adjustable oxygen concentration alarms
- Alarm delays and bypass
- Low minimum detection limit (1-10ppm or 0-0.500%)
- Data logger
- Wall mount or 2.0" pipe
- Compact size, 13.0"W x 9.5"H x 5.0"D
- 1 year warranty for analyzer, parts and labor
- 1 year sensor warranty, life expectancy 1-2 years

Standard installation includes all components needed to operate the oxygen analyzer with the slam-valve.

Application Details

- Oxygen analyzer
- Slam-valve
- Solar kit

BENEFITS

Oxygen Analyzer & Shut-in Benefits:

In addition to increased profitability of the well, Winn-Marion's system provides:

- Early leak detection
- Decreased downtime of the well
- Hazardous area approvals
- User selectable security settings
- Simple and intuitive front panel user interface
- AC or DC power options
- Explosion-proof enclosure and heater option



Winn-Marion
Companies

Denver, CO – (303) 778-6767

Salt Lake City, UT – (801) 676-0155
Phoenix, AZ – (480) 968-9344
Billings, MT – (406) 259-9234
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Calibrations - Gas Sampling • Flow Calibrations

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Analyzers - Gas Chromatographs • Continuous Gas Analyzers

BTU Analyzers • pH, Silica, Conductivity • Trace Oxygen • H₂S

Heat Tracing Instruments - Steam • Electric • Pre-Insulated Tubing Bundles

Transmitters - Differential Pressure • Gauge • Absolute Fully Welded Remote Seals • Multivariable • SIL 2 & SIL 3

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SALES



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

Turnkey Design, Installation and Commissioning of All

CONTROLS



Winn-Marion, Inc.

