# **Rosemount Oil and Gas Instrumentation**

Onshore Production



**Instrumentation for Real Time Field Management** 





## **REAL TIME FIELD MANAGEMENT**

Manage your field real time with Rosemount instrumentation from Emerson Process Management. With 50 years experience and over one million devices installed in oil and gas fields worldwide, our field automation expertise is truly unique. We can help in three ways:



- 1. Rosemount transmitters manage themselves, simplifying your job and allowing you to focus on more important tasks.
- 2. Our industry-leading technologies, such as wireless, enable you to automate wells faster.
- 3. Intelligent field devices provide the information you need for well control and field optimization.







# Simplify your job with self-managed transmitters

- Unmatched reliability backed with out-of-thebox quality checks on every device, strict manufacturing techniques and advanced transient protection.
- Long term stability reduces frequency of calibration man hours.
- Reduced maintenance because you can't be everywhere at once.



# Automate and get wells online faster

- All our products arrive assembled, tested and ready-to-install out of the box.
- Wireless technologies help reduce trenching, permitting, installation and labor costs.



## Field intelligence protects your people, assets, and the environment while helping you stay on budget

- Our diagnostics provide accurate information, enabling safe and optimal well control.
- Know before you go. Improve Pumper scheduling by knowing exact tank levels and instrument health from remote locations.



Emerson offers a wide variety of Rosemount instrumentation for your production applications. Our production offering includes well pad, infield gathering, CO<sub>2</sub>, waterflood, WAG, stream injection, and disposal applications. Our devices will help you control and manage your field production and operations.



Diagnose well problems and protect your surface equipment

Tubing, Casing, and Flow Line Pressure



Track/report well performance, eliminate billing and regulatory discrepancies

Gas Flow



**9** Optimize field **Production** 

**Enhanced Recovery** 

- CO<sub>2</sub>Waterflood
- WAG
- Steam
- Water Disposal



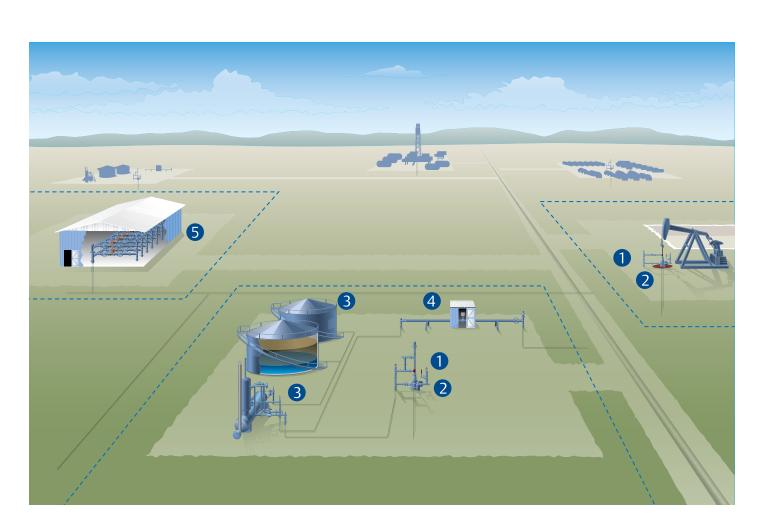
Prevent hydrates from plugging your lines

Flow Line Temperature



**3** Optimize tank inventory levels and production separation efficiency

> Production Tank and Separator Level & Interface



## **Tubing, Casing, and Flow Line Pressure**





Diagnose well problems and protect your surface equipment with Rosemount Tubing, Casing, and Flow Line Pressure transmitters. Like the Rosemount name, our transmitters exemplify reliability, so once installed you never have to lose sleep over their operation.



#### Start Your Process Off with Reliability

Reduce the man hours of your staff through exceptional transmitter quality, including advanced transient protection.

- Lengthen the time between calibrations with stability of up to 10 years.
- Warranties of up to 12 years demonstrate our confidence in the reliability of our products.
- 100% out-of-the-box quality tests ensure you only have to touch this transmitter once.
- The diagnostics in our intelligent field devices provide improved troubleshooting and information management.



#### Simplify Your Job with Easy Automation

Rosemount pressure transmitters come in a variety of configurations to get your wells online faster.

- Low power protocols are available with a variety of models for ease of integration.
- Rosemount transmitters arrive calibrated and assembled with manifolds or mechanical connections to get your well online faster.
- The right combination of wired and wireless devices makes it cost-effective to get more information effortlessly.

## **Production Line Temperatures**



Prevent hydrates from plugging your lines through the superior quality and reliability of Rosemount temperature products. Our transmitters and sensors are designed for your production application and shipped fully assembled and tested to make your job easier, save you money and help you manage your field.



### Shorten Your Work List with Self-Managed Temperature Transmitters

The quality and reliability of Rosemount temperature transmitters can make your job hassle-free, allowing you to focus on larger, more important projects.

- Extend the time between calibrations with greater stability.
- Keep costs down through extended transmitter life and reduced maintenance.
- Reduce trips to the field with Hot Backup®, a feature that automatically switches to a back up sensor if the primary sensor fails, protecting you from hydrate formation.
- Correct problems before they happen through predictive diagnostics such as sensor drift alert, notifying you of an out-of-spec sensor.



#### Easy Ordering, Easy Installation Makes Easy Field Automation

Complete temperature assemblies reduce engineering, ordering and installation costs.

- The Rosemount transmitter, sensor, extension and thermowell arrive fully assembled, calibrated and tested, ready for immediate installation.
- Pairing the Rosemount sensor and transmitter allows you to take advantage of features such as Transmitter-Sensor Matching. This will reduce measurement error by up to 75%, avoiding the conditions which cause the formation of hydrates.
- All our temperature assemblies are designed to ensure accuracy and reliability in the harshest production environments.
- Wireless technologies help reduce trenching, permitting paperwork and man hours.

## **Production Tank and Separator Level & Interface**





Improve tank operations and production separation through reliable, easy to use, virtually maintenance-free level and interface transmitters. Rosemount and Mobrey brand level products help manage your process and decrease the risk of spills that result in environmental damage.



#### Measure Every Drop with Our Level Instrumentation

The industry-leading accuracy and reliability of Rosemount and Mobrey level transmitters allow you to comply with environmental regulations, optimize Pumper schedules and ensure efficient separation.

- Our virtually maintenance-free devices measure both level and interface and are not affected by fluid density changes, turbulence, solids, coating or freezing.
- High pressure and temperature seals are designed to prevent leakage and perform reliably when exposed to extreme conditions.
- Dual compartment housing provides protection in harsh environments.
- Multiple level technologies are available including Radar, Pressure, Switches and Ultrasonic.



#### Well Pad Automation Has Never Been So Simple

Our level & interface devices are extremely user-friendly, simplifying your automation and making your job easier.

- Transmitters can be ordered pre-configured for easy out-of-box installation.
- Flexible radar probes allow for easy installation into tanks and separators.
- Radar devices do not need recalibration.....ever!

## **Gas Flow**



Track and report well performance and eliminate billing and regulatory discrepancies. Rosemount product quality and reliability can help you achieve savings for all of your gas flow measurement needs including custody transfer, allocation, regulatory reporting, and well monitoring. From the initial ordering and installation, to calibration and maintenance, our transmitters, standard and conditioning orifice plates, and complete line of flowmeters will help you save money.



#### Self-Managed Gas Flowmeters Where it Counts Most

In each gas flow application, every second counts. You can depend on the quality and reliability of Rosemount flow transmitters and orifice plates to deliver the most profit.

- Extend the time between calibrations with 10-year stability.
- Have confidence in a transmitter backed with a 12-year warranty.
- Measure widely varying flows with Rosemount Ultra for Flow technology while maintaining industry leading accuracy.
- Measure dry or wet gas with minimal straight run requirements and maintain maximum accuracy.
- Measure natural gas flow per AGA, API, and GPA standards.

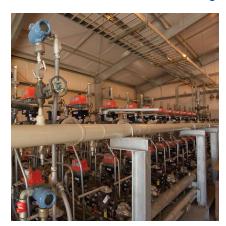


#### Reduce Cost with Innovative Gas Flow Technologies

Our complete gas flow transmitter, orifice, and manifold assemblies reduce capital and operational expenses.

- Communicate with any RTU or flow computer with a variety of protocols.
- Combine three measurements into one device with our award-winning MultiVariable™ technology.
- Minimize ordering and installation time and cost with assemblies that arrive fully-configured, leak-tested and ready to install right out of the box.
- Shrink environmental footprint with shortened straight-run requirement.

## **Enhanced Recovery**



Our expertise includes but is not limited to  $CO_2$ , water and steam injection operations, further distinguishing Emerson as the world leader in oil and gas production automation.



#### Optimize Field Production with Rosemount Flow Technologies

Emerson offers a wide variety of flow measurement technologies for enhanced recovery operations ranging from standard and conditioning orifice, magnetic flow, vortex, and Annubar® flowmeters. All of these Rosemount technologies have been rated #1 by industry users.

Installed applications:

- CO<sub>2</sub> operations; Orifice, Vortex, and Annubar flowmeters.
- Water injection and disposal; Magnetic flowmeter and Annubar.
- Steam; Vortex, Orifice, and Annubar flowmeters.
- WAG; DP flowmeter with wedge



#### Lead with Field Automation of the Future

Rosemount products offer intelligent and innovative measurements for enhanced recovery operations.

Installed applications:

- The 3420 Fieldbus Interface module smoothly integrates into existing Modbus systems, allowing you to experience the benefits of FOUNDATION™ fieldbus.
- The 848L Logic Transmitter controls motors, pumps and solenoid valves with direct communication from measuring devices and discrete I/O.

## An Extension of Your Oil & Gas Automation Staff



Our inside sales reps (ISRs) are dedicated to making our customers' experience personal and easy by understanding your business, your requirements and your individual needs. With extensive industry experience backed by a four year technical degree, our ISRs are an extension of your engineering department. Our customer care center has access to resources and tools to support your needs 24 hours a day, seven days a week.

Contact us at:

Within North America: 1-800-999-9307 Outside North America: +1-952-906-8888



Cut your instrument sizing time in half using the Instrument Toolkit® software package. Go from process conditions to model numbers to instrument data sheets in minutes. Request printouts of specification sheets, configuration sheets, and sizing calculation sheets. Easy to use and feature-filled, Instrument Toolkit empowers you to new heights of productivity.

#### Other Rosemount Brochures for the Oil & Gas Industry

Rosemount 3051S Series of Instrumentation	00803-01	00-6092
Rosemount 3051C Family	00807-01	00-4001
Rosemount 4600 Pressure Transmitter	00803-01	00-6107
Rosemount 304 Conventional Manifold	00807-01	00-5060
Rosemount Tubing & Casing Pressure Transmitter	00807-01	00-4849
Rosemount Differential Pressure Flow	00807-01	00-1233
Rosemount Annubar® Flowmeter Series	00803-01	00-6113
Rosemount Orifice Series	00803-01	00-6115
Rosemount Engineered Assemblies	00807-01	00-4650

Rosemount Temperature
Level Selection Guide
Rosemount Measurement Technologies

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