



Creating and Managing the Intelligent Field/Facility of the Future

Remote Operations
Real-Time Collaboration
Reservoir to Processing
Integration
Abnormal Situation
Prevention
World-Class Project
Execution

Global Petroleum 2010
June 8-10
Calgary, Alberta Canada
Booth #1144



EMERSON[™]

What's New for Emerson at Global Petroleum 2010

Today's exploration & production projects, whether they are onshore or offshore, can confront you with tough questions, especially when they're in remote and hard-to-access areas:

- Once new fields are found, how quickly can you get them producing?
- How can you reduce total installed cost and project schedules?
- How do you control operations and maintenance costs while maintaining throughput?
- What are the best methods for maximizing production in declining reservoirs?
- How do you get reliable support in hard to access regions?
- How do you know you're picking the right technology or the right partner?

At Global Petroleum 2010, you'll find answers to these questions in Booth 1144. No automation provider matches Emerson's ability to help you reach your goals, because no one touches more of your operation – from reservoir through transmission.

See for yourself how the right automation strategy can turn your project into the "Intelligent Field of the Future" – today, tomorrow, and for years to come.

INTEGRATED SOLUTIONS

Come join our industry experts as they show how Emerson combines technology and services to create solutions tailored to your needs.

I/O on Demand

The DeltaV version 11 release is the result of an intense focus on Human Centered Design (HCD). HCD will impact our industry by eliminating unnecessary work processes, removing complexity, and embedding knowledge. We will show you how innovative technologies like Electronic Marshalling can reduce control system footprint, streamline engineering effort, and reduce project risk. It has the ability to put any type of I/O where you want it, when you need it. That's what we call "I/O on Demand".

Wellhead Management

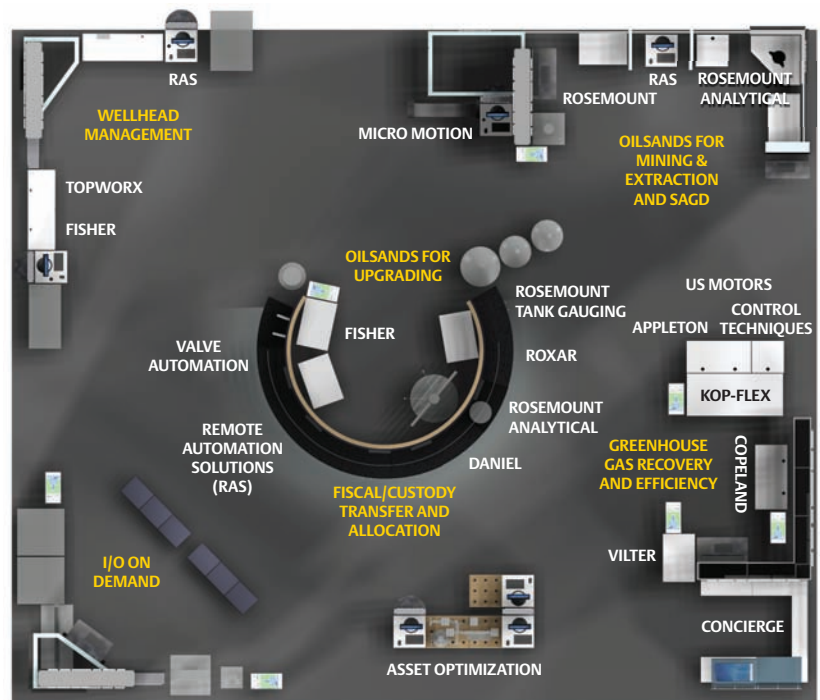
How do you deliver the optimal flow to process facilities without triggering a production upset or unplanned shutdown? Learn how Emerson helps you manage output from each wellhead by monitoring pressure, temperature, and flow.

Oilsands

The Oilsands industry has unique and often extreme control situations that need to be addressed. Emerson offers systems that offer protection from cavitation, erosion, plugging and leakage while providing reliable performance. See Emerson for expert advice in oilsands for mining and extraction, upgrading and SAGD applications.

Greenhouse Gas Recovery and Efficiency

Emerson is the leader in developing and applying world-class technology for the hydrocarbon industry. Energy efficiency gains and eliminating emissions from production and processing operations are critical. Our customers rely on Emerson for best-in-class technology for motors, compressors, electric drives, generators, power transmission, and



hazardous area electrical equipment. Emerson technology is helping customers produce and deliver oil and gas while eliminating harmful greenhouse gases from operations. Emerson is the leader in low maintenance vapour recovery systems, electrification, and remote automation of production and processing assets.

Fiscal/Custody Transfer and Allocation

Getting accurate and timely fiscal data from offshore facilities demands solutions with the flexibility to meet a wide range of application, data-management, and economic requirements over the life of the field. Come see how Emerson delivers products, systems, and fully integrated services to ensure precise measurement over time, cost-effective systems, and system reliability while helping manage measurement uncertainty.

TECHNOLOGY DEMONSTRATIONS

See for yourself how Emerson's leading-edge technology and services address the challenges you face.

Systems and Solutions

Process Systems and Solutions

- DeltaV™ digital automation system integrates all subsystems, providing a single window into your oil and gas production processes.
- Predictive diagnostics give you the tools to avoid unplanned shutdowns.
- I/O on Demand and electronic marshalling reduce design and installation costs, giving you what you want, when you want it, and where you want it.

Asset Optimization

AMS Suite, CSI Technology, and PlantWeb Services

- AMS Suite: Intelligent Device Manager offers a universal window into intelligent field devices -- including diagnostics, documentation, calibration management, and device configuration.
- AMS Suite: Asset Portal 4.0 powered by Meridium delivers real-time asset information from multiple locations to a single web dashboard.
- CSI 6500 Machinery Health Monitor delivers both protection and prediction for rotating assets.
- CSI 9420 Wireless Vibration Transmitter is the cost-effective solution for collecting vibration data in hard-to-reach locations.

Industrial Automation

Appleton

- Appleton QL Induction and LED lighting are engineered to provide long life in remote environments providing greater reliability and less time in maintenance.

Control Techniques

- Control Techniques, AC/DC VFDs are designed to perform in critical applications such as in areas of extreme outdoor temperatures (-50 to + 50°C).

Kop-Flex

- The Kop-Flex Powerlign® Torque Monitoring system identifies machine train deterioration enabling equipment to be maintained to its optimum performance levels. Equipment efficiency is essential for controlling fuel costs and emissions concerns.

Motor Technologies

US Motors

- US Electric Motors, specialists in manufacturing API547, IEEE841 and explosion-proof motors with NEMA premium efficiency level, provide solutions for production, transportation and refining applications.

Analytical

Rosemount Analytical

- The 700XA gas chromatograph provides precise measurement for trace contaminate monitoring, pipeline integrity, product quality, and process control.
- X-STREAM XE process gas analyzers offer a unique new web-browser interface that enables users to securely login to manage the analyzer over an Ethernet connection.
- Controlling pH with the TUPH 396R pH sensor that is designed for harsh, dirty applications helps eliminate corrosion in water boots.
- The accuracy and advanced sensor diagnostics of the Oxymitter in-situ oxygen analyzer saves fuel gas in your combustion process.

Measurement

Daniel

- Whether ultrasonic, turbine, or differential pressure, Daniel flow meters are industry standard for oil and gas custody transfer and allocation metering from production to distribution. Daniel ultrasonic meters with predictive intelligence power PlantWeb.
- Your single-source provider of liquid and gas metering solutions including metering skids and control systems, as well as the world's largest stationary and compact provers.
- Comprehensive life-cycle services reduce measurement uncertainty and maximize ROI of metering assets.

Micro Motion

- Micro Motion ELITE High Capacity meters provide precise flow/density measurements to help reduce non-productive time and well control events during drilling.
- In-line meter verification reduces maintenance costs, improves safety, and provides added assurance of sustained measurement performance.
- The accurate, low-maintenance CMFS Modular Flow Meter helps reduce operations cost while improving chemical injection program safety.
- Precise, sustainable fiscal measurement with ELITE High Capacity meters and density/viscosity sensors.

Remote Automation Solutions

- ROC and ControlWave RTUs: Controllers that provide the performance and flexibility needed for installation in rugged industrial and remote oil and gas applications.
- FloBoss 100 flow Computers: Field-mountable flow computers that offer audit trail and historical data for fiscal measurement in a compact rugged and low power device.
- ControlWave Plunger Optimization: Multiple lift and drop modes that improve gas well performance in production and consistency.
- ControlWave Well Pad Solutions: Can provide both communication and advanced distributed IO or distributed measurement to reduce pad costs and maintenance.

Rosemount

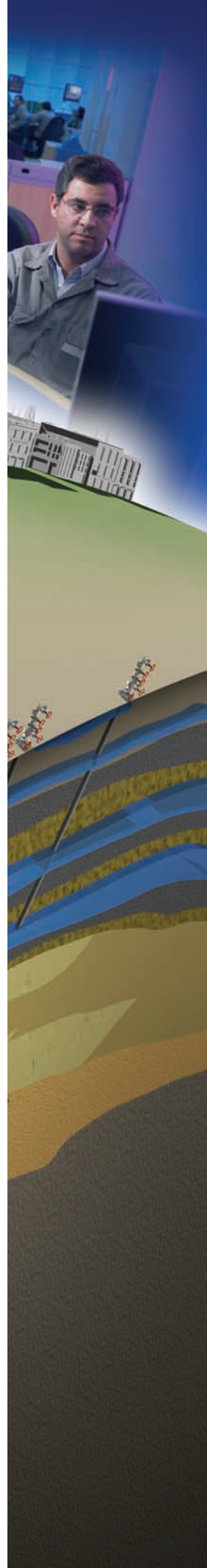
- Rosemount pressure, temperature, level, and flow solutions help manage oilfield assets through the power of real-time field intelligence.
- Rosemount level transmitters reduce the risk of environmental damage by protecting against tank spills.
- Rosemount vortex flowmeters optimize gas and steam injection to maximize oil production.
- Rosemount magnetic flowmeters reduce maintenance cost and provide stable accurate flow measurements in aggressive oil sands applications.

Rosemount Tank Gauging

- Rosemount tank radar level transmitters provide reliable and cost-effective measurement in a number of applications where other types of loop-powered transmitters can't be used. Rosemount's tank radar products work in your toughest applications.

Roxar

- The Roxar watercut meter is a full-bore, inline field-mounted instrument for accurate measurements of water in oil.
- CorrLog is a high-sensitivity, robust and user-friendly logging instrument used for measurement of ER, LPR, and galvanic corrosion probes.



Final Control

Fisher

- Fisher® wireless solutions provide linkage-less feedback solutions, valve position, percent-of-span, device temperature, and power module voltage for valves in hard-to-reach locations.
- Fisher C1 low-bleed controller provides easy control tuning, control capability from vacuum to high pressure, and high output with low pneumatic supply consumption.
- Fisher D3 with easy-Drive electric actuator combined with Fisher L2e level controller manages separator dump applications, reduces environmental impact, and reduces maintenance while eliminating venting of field gas.
- Fisher dirty-service anti-cavitation trim eliminates cavitation damage and associated noise.
- Fisher V500 furnace feed valve's rugged design extends the life of the valve allowing better resistance to erosive fluids at high temperatures.

TopWorx

- TopWorx GO® Proximity Switches offer superior performance for oil & gas applications.
- TopWorx Valvetop® DXS stainless steel valve controllers are ideal for corrosive environments, combining bus networking, pilot valve, and position sensors in an explosion-proof enclosure.
- TopWorx 4310 Wireless Position Monitor allows quick and easy monitoring of rotary and linear valves/actuators.

Valve Automation

Emerson's Valve Automation consolidates a vast array of valve automation products and services for the oil and gas industry, from wellhead to process:

- Bettis scotch yoke hydraulic and pneumatic actuator for Emergency Shutdown (ESD) and Safety Instrumented Systems (SIS).
- PressureGuard self-contained hydraulic actuator for ESD applications where power source is unavailable or unreliable.
- Bettis Multi-port Flow Selector Valve (MPFS) provides a reliable automated process for well sampling on test manifolds.
- Bettis and Shafer Gas-Over-Oil rotary and linear actuators convert gas pipeline pressure into hydraulic force for reliable isolation of pipelines.
- EIM TEC2000 intelligent non-intrusive electric actuator provides intelligent control for on/off and modulating valve applications.

Gas Compression

Vilter and Copeland Scroll

- Vilter Single Screw and Copeland Scroll® Gas Compressors developed specifically for gas processing, emission reduction, biogas, LNG & CNG, and production applications, are engineered to reduce operating costs, optimize well production and reduce greenhouse gas emissions.

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