

# SmartProcess<sup>™</sup> Oil & Gas Application Suite Achieve unparalleled productivity with best-in-class application software for critical oil & gas operations.



# You are expected to do more with less, while dealing with increasing challenges.

With Emerson's SmartProcess Oil & Gas Application Suite, you have turnkey, off-the-shelf applications available for monitoring, controlling, and optimizing your operations. Gone are the days of investing time and money to create custom programs — and the associated costs of supporting them over their lifecycle. We've leveraged industry experts to develop best-in-class application software for your critical operations in the oilfield to help you maximize your efficiency, safety, and profitability.

"Traffic fatalities up as much as 1050% in high activity shale plays."

– Texas Department of Transportation



"42% of abnormal situations or upsets in processing facilities are caused by people or their work context."





"One estimate is that 30% of the existing workforce will retire in the next 5 years, and take a large slice of the operating and commissioning experience into retirement."

- Kolmetz.com



"Factory-style operators and standard wellpad layouts improve safety and reduce drilling and completion costs 30-40%."

– Alvarez & Marsal







Instead of being distracted by frequent emergencies and problems, what if you could improve production — at the lowest lifting costs — while still protecting your people and the environment?

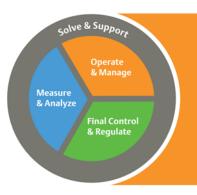
# The Emerson SmartProcess Oil & Gas Application Suite for continuous process optimization







The Emerson family of RTUs and Flow Computers leads the way in enabling you to monitor, control, and optimize your dispersed operations. Our SmartProcess Oil & Gas Application Suite enhances your operation in four critical areas: efficiency, reliability and uptime, cost and supportability, and safety and environmental. With a library of best-in-class applications at your command, you can routinely automate your operations to maximize performance, improve consistency, reduce engineering and support costs, and reduce process faults. By configuring our off-the-shelf solutions rather than developing custom programming, your staff can deliver top performance results.



To perform at your best, you need to continuously monitor and optimize in real-time, with potential upsets addressed before they become reality. Across thousands of square miles you need intelligent agents acting on your behalf, spanning the chasm between monitoring and decision-making with wisdom of years of experience. The Emerson SmartProcess Oil & Gas Application Suite intutively embeds best practice operational logic in our controllers, leading to improved efficiency, uptime, supportability, and safety.

**Production** ■ Gas ■ Oil ■ NGL ■ Storage Management **Transmission** ■ Measurement ■ Control



#### **Achieve greater production**

Our optimization algorithms for artificial lift have been refined and proven on tens of thousands of sites – resulting in 3-5% production rate increases.

## **Ensure consistency between locations**

One customer recently reviewed seven "identical" units and found discrepancies between how each were controlled. The solution? Deploy standard software applications to do it the right way every time.

#### **Reduce lifecycle costs**

Making changes is as simple as clicking configuration choices, eliminating the need to pay for customer programming. The result? Save up to \$30K per site over the lifecycle.

## Protect your people by reducing unnecessary time in the field

Traffic accidents are one of the leading causes of fatalities in the Oil & Gas industry. Keep your people safe by reducing startup time, eliminating unnecessary process faults, and getting better process visibility from the office.

### Solutions to optimize every operation in your process stream — no matter how remote

#### **Production Management**

- Well Monitoring
- Free Flow Choke Control
- Gas Well Deliquification (Intermitter, Plunger Lift, Gas Lift)
- Oil Well Optimization
- EOR & Injection Control (Including Artificial Lift)
- Facility Equipment Control

#### **Separation Treatment**

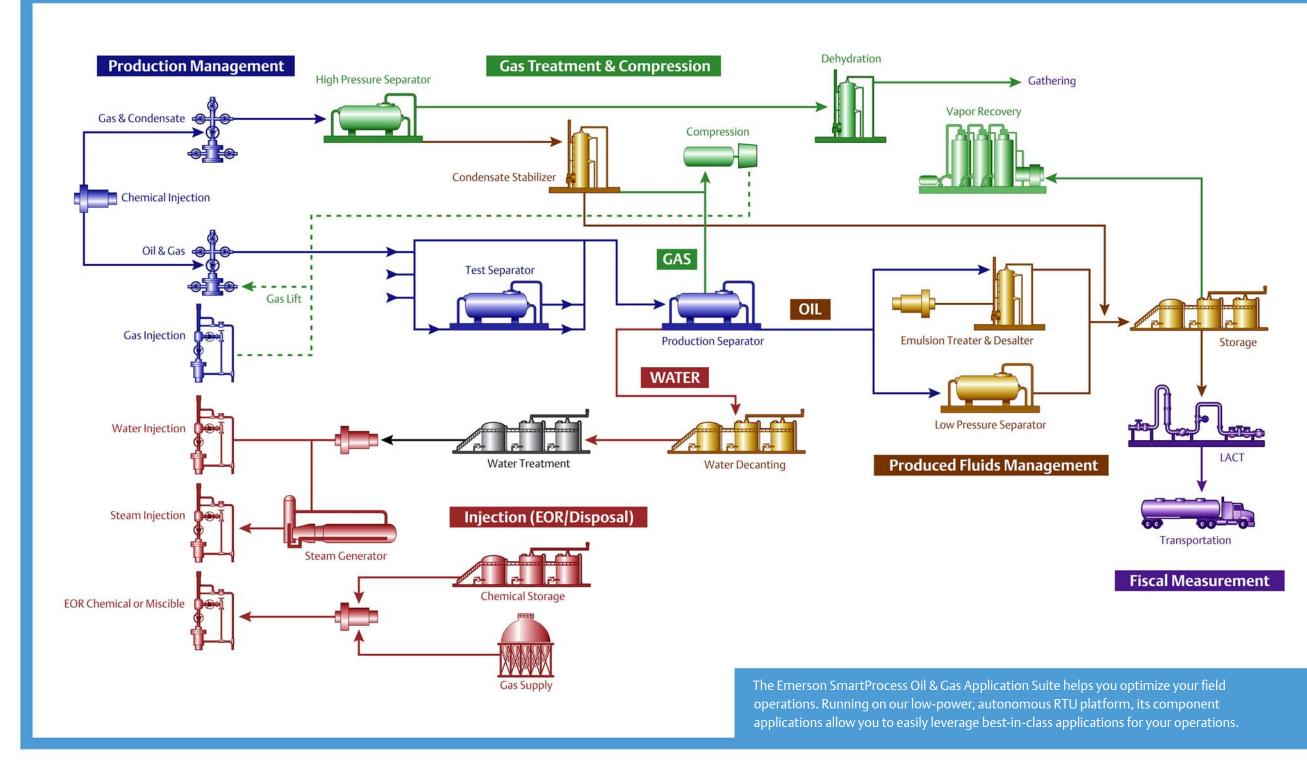
- Separator Control
- Heater Treater Control/Optimization
- Cyclic Well Test Management

#### Produced Fluids Management

- Tank Management
- Truck Haul Tracking
- Vapor Recovery
- Disposal
- LACT Operation

#### Gas Treatment & Gathering

- Gathering & Custody
- Station Manager
- Gas Control Manager
- AGA
- API



#### **Maximize uptime**

With best-in-class operational elements, use our solutions to help achieve higher operational uptime.

#### **Eliminate programming**

Using a "configurable" rather than a "programmable" solution reduces total installed cost.

#### Minimize field time

Keep your employees out of harm's way by reducing their time in the field installing, configuring, and troubleshooting one-off solutions.

#### **Easy SCADA integration**

Seamless and simple integration into your SCADA host system, regardless of which you use. Accelerate deployment time and ensure that it's right the first time.

#### **Consistency**

Whether you have 10 or 10,000 wells, ensure that they operate the same way.

#### **Reduce support costs**

Turnkey, off-the-shelf solutions are easier to support and more cost-effective over the lifecycle — making your operations more efficient.



## **Production Manager Series**

#### Increase the efficiency of your production assets

Increase the efficiency of your operations by selecting the application you need from our catalogue, loading into your RTU, and starting up quickly. Add more applications to scale up your operations or change applications as your wells progress through the lifecycle — without changing hardware.



#### What's your challenge?

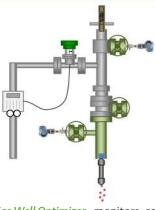
"With completed wells costing over \$10M, I need production fast to meet my financial goals. Downtime isn't an option."



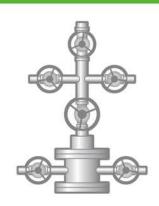
#### What's your opportunity?

An Oil & Gas production customer was able to reduce their unaccounted-for losses from 15% to under 1%, dramatically improving profits. The solution: Tank Manager.

#### **Gas Applications**



*Gas Well Optimizer* - monitors, controls, and optimizes your production wells. Includes deliquidification techniques such as intermitting, plunger lift, gas lift, and more.

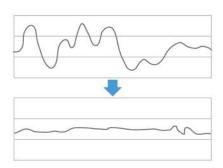


**Automated Choke Control** - automatically adjusts choke position to protect reservoir and maximize production.



AGA Fiscal Measurement

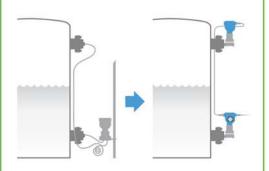
#### **Oil Applications**



*Injection Controller* - controls and optimizes your steam and water injection for enhanced oil recovery or for disposal purposes means injecting the right amount while protecting assets.



Gas Lift for Oil - controls and optimizes lift gas applied to oil-producing wells to maximize production.

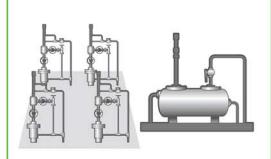


API Measurement

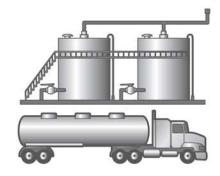
#### **Site-Wide Applications**



Surface Control Manager - allows easy configuration for balance-of-plant equipment including separators, heater treaters, shut down logic, and more.



Well Test Manager - automation of cyclic test well separator for up to 64 wells.



Tank Manager - provides tank inventory management, well-to-tank allocation, and truck haul audit capabilities for up to 24 tanks. Get paid for what you produce.









### **Transmission Manager Series**

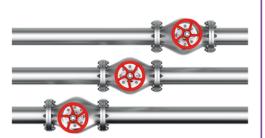
## Your solutions for operating your transmission systems more efficiently

Maintain the integrity of your assets and avoid safety and environmental incidents, all while driving to a more efficient operation. By using industry-leading, proven software applications you can ensure consistency, increase effectiveness, reduce installation, support costs, and minimize operational errors.

#### **Station Manager**

#### **Gas Control Manager**

#### **Cause & Effect**



Complete solution for multi-run, multistation measurement stations on pipelines. Supporting six or eight unidirectional runs or three bidirectional runs.



Configurable solution to do common gas measurement functions such as station emergency shutdown, resettable volume/ energy accumulators, run switching, calculations, process control, and more.



Simple logic for balance-of-plant automation at measurement and compressor stations.



#### Find us around the corner or around the world

For a complete list of locations please visit us at www.EmersonProcess.com/Remote



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