



USE THE MOST  
**advanced  
instrumentation**

TO ACHIEVE UNPARALLELED PRODUCTIVITY

EXPLORE

THE SCALABLE SOPHISTICATION OF THE  
ROSEMOUNT 3051S SERIES  
OF INSTRUMENTATION

# innovation

REACHING ACROSS YOUR OPERATION

With its scalable platform delivering integrated pressure, flow and level solutions, the **Rosemount 3051S Series of Instrumentation** is the industry's premier measurement choice.

Learn how the **ROSEMOUNT 3051S SERIES OF INSTRUMENTATION** can help you maximize productivity, quality, energy efficiency and safety.

LEARN



# Achieve Record **PRODUCTIVITY**

## Increase your **PRODUCTION THROUGHPUT**

+ Recurring maintenance and downtime issues, process variability and inexperienced personnel can all diminish your productivity. With the Rosemount 3051S Series of Instrumentation, you can improve your process insight and empower your personnel to work faster and more effectively — so you can produce at optimal levels, more often.

**PRODUCTIVITY >**

[+ LEARN MORE](#)

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# Achieve Record PRODUCTIVITY



“We have had  
**NO LOST  
PRODUCTION**  
and better on-stream  
operation since  
installing Electronic  
Remote Sensors.”\*

\*Tim Anderson, Chevron Phillips,  
I&E Reliability Team Leader

.01 Shrink maintenance and downtime

## + SHRINK MAINTENANCE AND DOWNTIME

### Go Wireless and monitor more assets

- + Predict equipment failures by monitoring more assets wirelessly, with greater than 99% data reliability at 40-60% savings
- + Reach the most remote areas and stay fully optimized
- + See how the Rosemount 3051S helped a refinery by predicting pump filter plugging



### Monitor proactively with Advanced Diagnostics

- + Stay on top of the health of your process and detect problems before they impact production
- + Monitor device electrical loop integrity to uncover common sources of false readings
- + Learn how the Rosemount 3051S with helped a refinery

### Boost level measurement reliability with our Electronic Remote Sensor System

- + Eliminate false level indications and reactive maintenance trips from wet and dry legs
- + Improve reliability by replacing mechanical components with a digital architecture
- + Discover how the Rosemount 3051S helped Solvay Chemical

### Get rock-solid reliability with our SuperModule™ Platform

- + Never worry about measurement performance, even in the most extreme conditions
- + Achieve ultimate reliability with its robust, all-welded, hermetically sealed design – backed by a 12-year limited warranty
- + See how the reliability of the Rosemount 3051S SuperModule Platform helped a major oil producer

# Achieve Record PRODUCTIVITY

The **ACCURACY  
AND STABILITY**  
of the Rosemount 3051S  
reduced crude pre-heater  
process variability.\*

*\*Leading refinery in Southeast Asia*



## + TIGHTEN PROCESS CONTROL

### Control closer to set point

- + Use our Ultra and Ultra for Flow performance classes to overcome process variability and its impact on quality, efficiency and throughput
- + Maintain the tightest process control with a 10-year stability guarantee
- + Find out how the Rosemount 3051S Ultra helped a municipality of its water distribution network



### Improve batch quality and maximize performance

- + Upgrade your vessel measurement with our Electronic Remote Sensor (ERS) System to eliminate process variability
- + Gain tighter control over your vessels with more accurate and complete process information
- + Discover how the Rosemount 3051S helped a specialty chemical manufacturer

### Correct for changing process conditions

- + Use our MultiVariable™ Flowmeters to correct for changing process conditions and get an accurate flow reading every time
- + Improve control and throughput with a flowmeter that provides Mass and Energy Flow with compensation for 25+ parameters
- + See how the accurate flow readings provided by Rosemount 3051S helped a processing plant

# Achieve Record PRODUCTIVITY



“This technology has opened up **NEW POSSIBILITIES** for us. We plan to continue utilizing wireless technology to improve our oil production, improve our cost position, and make our people **MORE PRODUCTIVE.**”\*

*\*Michael Fischback, Facilities Engineer, PXP*

## + ENSURE SPOT-ON SETUP AND OPERATIONS

### Work more efficiently through intuitive Device Dashboards

- + Make it easy for your staff to take advantage of Rosemount 3051S technology advancements
- + Use configuration and troubleshooting screens that intuitively fit the way you work

### Reduce deployment time by 70% with Wireless

- + Eliminate the design and construction complexities of wired infrastructures
- + Use [Rosemount 3051S](#) for fast, reliable network design based on best practices
- + Commission your network with simple, drag-and-drop configuration
- + Learn how the Rosemount 3051S [was](#) rather than days

### Let us engineer your flow measurements with MultiVariable Flowmeters

- + Eliminate manual configuration of complex equations into a host system
- + Configure your flowmeter in two easy steps using our Engineering Assistant™ software, or let us pre-configure it at the factory
- + See how easy it is to configure Rosemount 3051S with the [Rosemount 3051S](#)



# Keep Your Operation ON-SPEC

Generate the **RIGHT QUALITY,  
EVERY TIME**

+ To meet your production goals, you have to be on-spec when it counts: that's all day, every day. Choose the advanced capabilities of the Rosemount 3051S Series of Instrumentation to maintain repeatability, operate closer to set points and ensure the integrity of your data — so you can produce to your exact quality targets.

[+ LEARN MORE](#)

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# Keep Your Operation ON-SPEC



“The Rosemount 3051S is the most important piece of equipment that we can turn to at any time – knowing that we can get the **ACCURACY, RELIABILITY, and CONTINUED PERFORMANCE** for any process measurement.”\*

*\*Yoga Anand, Instrument & Controls Engineer, BP*

## + GET ACCURATE MEASUREMENTS

### Optimize quality with more accurate and repeatable readings

- + Eliminate inaccurate measurements that lead to process variability and inconsistent quality
- + Use our Ultra and Ultra for Flow performance classes to make more accurate measurements – backed by a 10-year stability guarantee for added peace of mind
- + Discover how the Rosemount 3051S Ultra provided the most accurate readings at a wind tunnel test facility



### Reduce measurement variability with our SuperModule Platform

- + Ensure the highest product quality in even the most demanding field conditions with our all-welded, hermetic design
- + Optimize performance with our patented Saturn™ sensor technology that corrects for overpressure and line pressure effects

### Leverage our MultiVariable Flowmeters for unmatched performance

- + Don't let even small changes in line pressure or process temperature affect your product quality
- + Dynamically correct for 25+ different parameters with our MultiVariable Flowmeters to ensure accurate and repeatable flow measurement
- + Find out how a gas supplier with Rosemount 3051S MultiVariable Flowmeters



# Keep Your Operation ON-SPEC

The Rosemount 3051S Compact Conditioning Orifice Flowmeter provides an **EASY INSTALLATION**. More importantly, it eliminates the many potentially dangerous **LEAK POINTS** inherent in traditional orifice plate installations.\*

\*A Southeast Asian Processing Platform



## + INSTALL FOR OPTIMAL PERFORMANCE

### Use our DP Flowmeters to eliminate troublesome impulse lines

- + Avoid the leaking, plugging and freezing of impulse lines that cause measurement inaccuracies
- + Optimize control loop performance and ensure consistent product quality
- + Explore the capabilities of our [viewing the Rosemount 3051S](#)

by



### Simplify instrument installations on level applications for improved performance

- + Use the Rosemount 3051S ERS System for better performance and a 90% improvement in time response on tall vessels and towers
- + Eliminate wet legs, dry legs and excess capillary on shorter vessels with Tuned-System™ Assemblies
- + Learn how to simplify your installations and improve performance with [and](#)

### Make installation even smarter with the Remote Display and Interface

- + Direct mount to the process and access transmitter capabilities and diagnostics at grade with our patented Remote Display and Interface
- + Eliminate the need for impulse lines and provide convenient device access to improve operator knowledge and safety
- + See how our Remote Display and Interface helped a chemical manufacturer

# Keep Your Operation ON-SPEC



Rosemount 3051S  
Advanced Diagnostics  
detected plugged  
impulse lines and  
**REDUCED  
SHUTDOWNS.\***

*\*Grain Processor in the United States*

## + FIND HIDDEN TROUBLE SPOTS

### Use Advanced Diagnostics to uncover hidden process issues

- + Trouble spots such as plugged impulse lines and distillation column flooding reduce your quality and diminish profits
- + Our Advanced Diagnostics with Statistical Process Monitoring improves process visibility and alerts you to abnormalities – so you can maintain product quality
- + Learn how Rosemount 3051S can proactively alert operators to the onset of



### Tap extra measurement points with Wireless

- + Monitor more locations at 40-60% savings over wired options, with 99%+ data reliability
- + Extended-range antenna options provide access to remote locations
- + See how the Rosemount 3051S prevented over-pressurizing to

# Enhance ENERGY EFFICIENCY

## Manage it better by MEASURING IT BETTER

+ Rising energy costs are forcing everyone to find new ways to be more efficient and eliminate waste wherever they can. Use the Rosemount 3051S Series of Instrumentation to better control critical energy measurements, gain visibility into your energy use and help prevent the conditions that lead to energy loss.

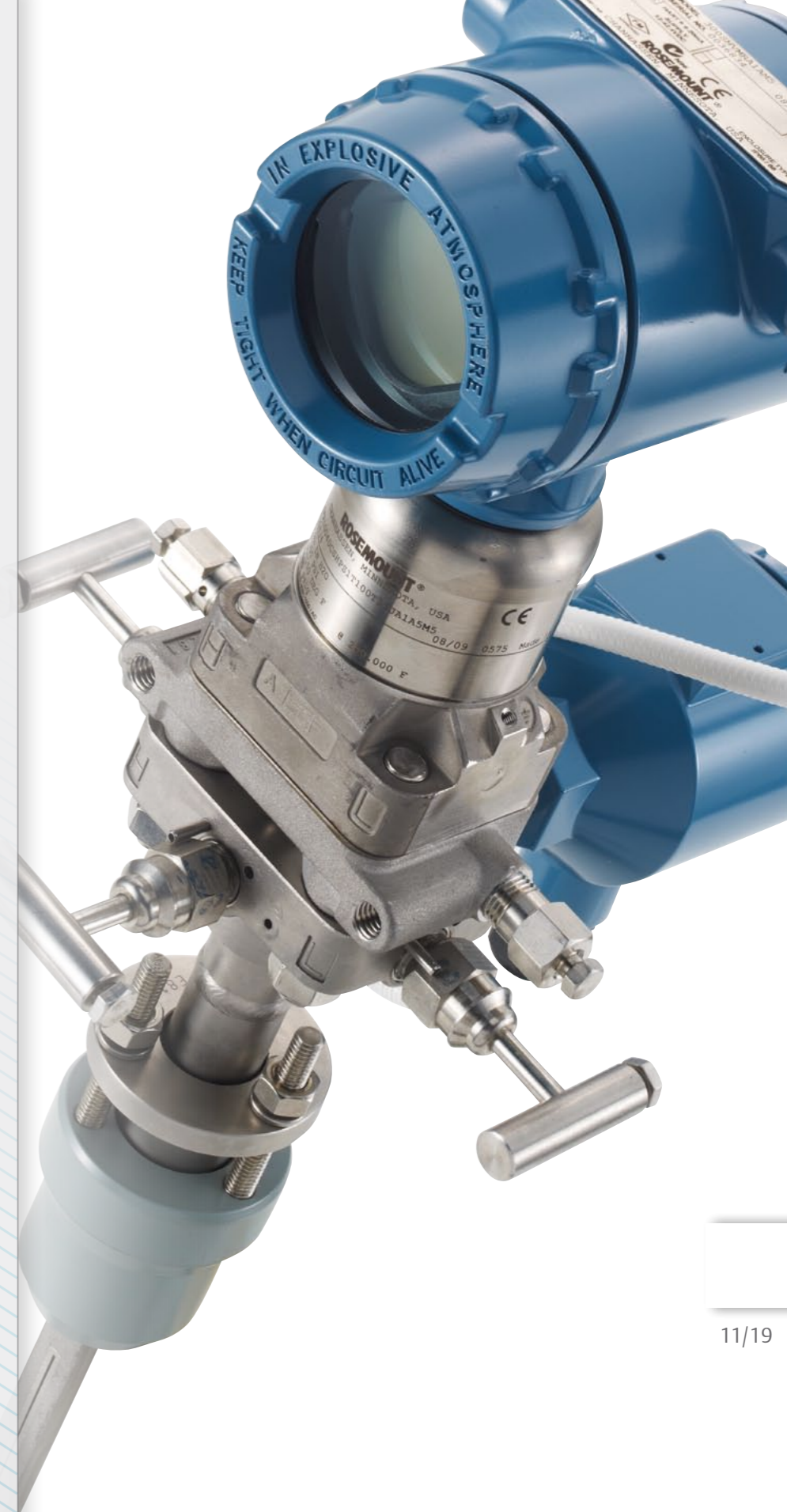
[ENERGY EFFICIENCY >](#)

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# Enhance ENERGY EFFICIENCY

Refineries typically spend **50%** of operating costs on energy.\*

\*Energy Star



## + PRODUCE ENERGY MORE EFFICIENTLY

### Gain greater control over air and fuel flow

- + Optimize combustion in your boilers and furnaces with Rosemount 3051S MultiVariable Flowmeters
- + Get three measurements along with Mass and Energy Flow in one flowmeter to compensate for 25+ different parameters, while updating flow output 22 times per second – to help you achieve greater control over air and fuel flow rates

- + Find out how Rosemount 3051S

helped a glass

manufacturer



### Achieve the right flow ratios with Ultra for Flow performance

- + Maintaining an accurate fuel-to-air ratio is critical for safe combustion, energy efficiency and emissions control
- + Use Ultra for Flow to more accurately measure air and fuel flows over a wider flow turndown – lowering your costs by improving efficiency
- + See how the Rosemount 3051S Ultra for Flow's high turndown capability maintained superior accuracy during low-flow conditions for

# Enhance ENERGY EFFICIENCY

The Rosemount 3051S MultiVariable Transmitter maintained a **HIGH LEVEL OF ACCURACY** during low-flow conditions, allowing for better management of steam usage and **REDUCED ENERGY COSTS.\***



\*University in Northeast USA

## + GET SMARTER ABOUT ENERGY USAGE

### Add flow monitoring points cost effectively

- + You want greater insight into your use of water, gas, steam and other energy sources – but installation and wiring are costly and time consuming
- + Use our Wireless DP Flowmeters to quickly add monitoring points without the hassles or expense of wiring, assembly or piping modifications
- + Discover how easy it is to add Rosemount 3051S and see how a silicone manufacturer



### Reduce unseen variability with Advanced Diagnostics

- + Running at peak efficiency is unachievable without full process visibility
- + Our Statistical Process Monitoring capabilities expand your visibility, so you can proactively detect unstable furnace and boiler flames, entrained air or condensation in steam lines
- + Learn more about how Rosemount 3051S can reduce variability by warning operators of in their process

### Track steam and gas usage with our MultiVariable Flowmeters

- + Reduce energy costs by more effectively tracking energy production, demand and total usage of steam and natural gas
- + Get accurate measurement of energy flow to help you locate anomalies that lead to energy loss, allowing you to optimize production
- + Find out how the Rosemount 3051S was used to

# Enhance ENERGY EFFICIENCY

**ELECTRONIC REMOTE SENSOR**  
technology allowed us to make level  
measurements **WITHOUT**  
**HEAT TRACING**, which  
helped us cut back on our  
electric utility expenses.\*

*\*Pulp & Paper Mill,  
Heinzel Group, Austria*



## + OVERCOME COSTLY LEGACY PRACTICES

### Reduce your energy and utility consumption

- + Eliminate steam and electrical heat tracing with the Rosemount 3051S ERS System
- + Achieve reliable level measurement without complicated flushing and purge systems
- + Discover how one pulp and paper mill used Rosemount 3051S to



### Stop budget-killing pressure loss

- + Your energy bill may contain costs resulting from the high permanent pressure loss associated with orifice plate flow metering
- + Use our Annubar™ Flowmeters to minimize blockage in the pipe, reducing permanent pressure loss by up to 96% to lower pumping, compression and fuel costs – for a better bottom line
- + Learn how Rosemount 3051S can lower permanent pressure loss



# Protect WHAT MATTERS

Rosemount 3051S Wireless Flowmeters helped a silicone manufacturer achieve a **SAFER WORK ENVIRONMENT** for its maintenance personnel by **ELIMINATING HAZARDOUS TRIPS** to the measurement points.\*

\*A large silicone manufacturer in the Northeastern United States



## + SAFEGUARD YOUR TEAM

### Expand monitoring points and improve worker safety with Wireless communications

- + Quickly and cost-effectively add monitoring points to eliminate operator rounds, keeping your personnel safe and out of hazardous areas
- + Use our Wireless devices to view data online from a safe location
- + Learn how the Rosemount 3051S Wireless

occurring in harsh, remote areas



### Reduce the use of dangerous ladders and catwalks

- + Don't expose your workers to hazardous areas or potentially harmful heights to access instruments
- + Our Remote Display and Interface allows you to install an instrument in a hazardous location and access it up to 100 feet away, ensuring your personnel have safe, at-grade access to key process information
- + See how our Remote Display and Interface provided at-grade indication and for technicians

### Minimize trips to the field and be smarter before you go

- + Instead of sending your crew into hazardous areas, you can check if the transmitter is operating correctly – in just seconds with our intuitive Device Dashboards
- + By learning where the problem is and what parts are needed to correct it, you'll minimize time in the field and enhance personnel safety



# Protect WHAT MATTERS



Are you getting all the  
**INFORMATION  
YOU NEED** about  
your instrument's  
**ELECTRICAL LOOP?**

## + DIAGNOSE LOOMING DANGERS

### Stay protected with Rosemount 3051S Advanced Diagnostics for Safety

- + Power Advisory Diagnostics detect electrical loop issues, an unstable power supply and corroded wiring terminals before they impact your operation
- + Our Statistical Process Monitoring proactively detects unstable furnace and boiler flames to prevent dangerous flame-outs
- + Be fully confident that you have the safest, most reliable transmitter for use in a SIS system – with coverage from the process to the device to the host system
- + Explore how the Rosemount 3051S with [Smart Wireless THUM™ Adapter](#) can



### Access safety-enhancing data with a Smart Wireless THUM™ Adapter

- + Valuable process, electrical loop and device diagnostic information that impacts safety can be trapped in your transmitter with an analog-only logic solver
- + Access this critical data in the Rosemount 3051S with a Smart Wireless THUM Adapter, which makes HART devices wireless and helps spot upcoming issues that may jeopardize safety – while maintaining your safety-certified loop
- + See how you can get easy information access to both the Rosemount 3051S [Smart Wireless THUM™ Adapter](#) and Advanced Diagnostics using the [Smart Wireless THUM™ Adapter](#)

# Protect WHAT MATTERS



Customer eliminates risk of  
**ENVIRONMENTAL FINES**  
by installing wireless transmitters  
to enable **MORE ACCURATE  
REPORTING.**\*

*\*Gas Transmission customer in the United States*

## + CLAMP DOWN ON FUGITIVE EMISSIONS

### Use Wireless for more insightful monitoring — and prevent potential fines

- + Gain new visibility into your plant's emissions to reduce potential fines, penalties and public relations damage
- + Deploy quickly – even in hard-to-reach spots – while achieving 99%+ data reliability
- + Learn how the Rosemount 3051S Wireless significantly



### Eliminate troublesome impulse lines with Integrated Flowmeters

- + Process piping and impulse lines – common sources of fugitive emissions – are time-consuming and costly to install and maintain
- + Use Rosemount 3051S Flowmeters to reduce potential emission points by 70% and get a fully assembled, leak-tested solution that offers reliable performance
- + Explore the capabilities of our [Rosemount 3051S Flowmeter](#) by viewing the Rosemount 3051S



To learn more or get connected  
to an Emerson sales representative,  
**CONTACT US** today.