# UPSTREAM PERFORMANCE FUELED BY INSIGHTS

Access to real-time data and insights with Honeywell Upstream Production Performance Suite drives production optimization, high performance and low OpEx.

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### **CHANGING TIMES DEMAND REAL-TIME INSIGHTS**

As the upstream oil and gas industry evolves, there's a complementary increase in complexity, competition and the demand for greater safety and security. This makes the need for actionable insights that drive optimal operations stronger than ever. Honeywell's new **Upstream Production Performance Suite (UPP Suite)** can help you cut through the complexity, uncover valuable insights for improved facility management—from the field to the board room—and increase performance and efficiency. Offerings like IIoT sensors, automation and controls, advanced analytics, performance modules, cybersecurity, safety control, process control, asset performance monitoring, integrated visual analytics and more are designed to help you identify, extract and perform at the highest level. A one-stop shop that adds value to your processes, Honeywell UPP Suite can help you transform your upstream operations.

### AN INTEGRATED APPROACH TO PEAK UPSTREAM PERFORMANCE

Our suite of solutions can make an impact on onshore and offshore facilities whose operations vary in size, scale and need. These solutions, delivered through Honeywell Forge, enable the peak performance of upstream processes. Data collected is automatically analyzed for visibility into all operations, real-time notifications and improved decision-making. With UPP Suite, critical functions—measuring flow rates, monitoring leaks and controlling pressure levels—are at your fingertips.

We cater to all requirements throughout the upstream sector because we understand there's no solution that's one-size-fitsall. Whether your plant is just getting started or you need help refining advanced procedures, Honeywell UPP Suite helps deliver smarter, safer and more efficient upstream operations.

#### UPSTREAM PRODUCTION PERFORMANCE SUITE

Digitalization • Process Performance Monitoring & Control • Well Performance Monitoring • Equipment Health & Performance Monitoring • Operations Monitoring
Sensing & Process Control • Production Monitoring & Control • Safety Control • Integrated Visual Analytics
Cyber & Networking Security Solutions • Cybersecurity Assessment • Secure Media Exchange (SMX solution) • Advanced Monitoring and Incident Response • Managed Industrial Cybersecurity Services
Integrated Operations • Remote Operations • Digital Video Manager (DVM)/CCTV • Integrated Visual Analytics



### **CUTTING THROUGH COMPLEXITY AND CHALLENGES**

Despite technological progress made in oilfield technology amid the digital transformation, Industry 4.0, IIoT and remote operations over the past 15 years, only a few major companies can fully leverage investments in these initiatives for top-quartile upstream oil and gas operations. That is, there are still opportunities to leverage digital technologies for enhanced production, lower operating costs, improved safety and reduced operating risks in upstream processes.

We've identified major challenges in the oil and gas industry and how Honeywell UPP Suite, fueled by actionable insights, can deliver long-term performance and success.

### DRIVING PRODUCTION OPTIMIZATION, PERFORMANCE AND OPEX REDUCTION

# **CHALLENGE**: Varying Levels of Operator Competency and Turnover

**SOLUTION:** Operator Training Simulators provide high-fidelity models to assist operators, especially during plant start-up operations. Augmented reality and virtual reality provide a near-real experience of operating the plant.

### **CHALLENGE:** Operational Integrity, Safety, Reporting and Overload

**SOLUTION:** Part of the Honeywell Forge Alarm and Operations Management Suite, Alarm Management, Operations Monitoring and Operator Logbook enable operators to maintain an electronic log of important events during shifts, manage alarms and reduce operator overload.

#### CHALLENGE: Improving worker productivity

**SOLUTION:** Many oil and gas operators have not yet moved to using mobility software for improving the productivity of the frontline worker and field data capture. Honeywell Forge Inspection Rounds is a cloud-based SaaS offering that is used by many industrial companies, including upstream operators for the collection of field data for production and maintenance operations. Since it can work in offline mode and sync when a network is available, it is designed considering oilfield requirements in mind.

# **CHALLENGE:** Maximizing Production from Existing Wells and Facilities

**SOLUTION:** Advanced Process Control (APC) technology is used by oil and gas operators to stabilize and increase production/maximize yield of productions e.g. condensate. While APC is most commonly used for surface facilities, we do have customers who deploy the solution for wells e.g. closed-loop optimization of electrical submersible pumps, wellhead choke control, gas-lift optimization and other such use cases.

#### CHALLENGE: Unplanned Downtime Caused by Equipment

**SOLUTION:** Honeywell is a leading provider of Asset Performance Management solutions with a strong track record in upstream oil and gas. We deliver out-of-the box performance models for widely used industry equipment including wells, pumps, compressors gas turbines, heat exchangers and other oilfield equipment.

# **CHALLENGE:** Greenhouse Gas Emissions Monitoring and Reduction

**SOLUTION:** With rising emphasis on sustainability, upstream oil and gas companies are working to reduce their GHG emissions. We help upstream operators and service companies reduce their GHG emissions. Key solutions include methane sensors and hyperspectral cameras with machine learning capabilities that provide 24/7 GHG emissions monitoring. The Emissions suite includes solutions that span across GHG measurement, monitoring, reporting and reducing emissions. This is possible because of our comprehensive range of offerings that customers have been using in the oil and gas industry.

# **CHALLENGE:** Increased Cybersecurity Risks on Critical Infrastructure

**SOLUTION:** Honeywell Forge for Cybersecurity is moving from separate product offerings to a unified suite of applications, services and products that can alleviate unplanned downtime and address a range of cybersecurity requirements from asset discovery and monitoring to secure remote access and fully managed services. Our state-ofthe-art Industrial Cybersecurity Lab and dedicated Security Service Centers are world-class environments for proprietary cybersecurity research, development and customer support.

### A SMARTER FUTURE FOR OIL & GAS STARTS UPSTREAM

Honeywell UPP Suite drives differentiation in the changing upstream oil and gas industry. Developing new fields, sustaining production from existing fields, lowering operational costs, improving facility management and controlling the flow of oil and gas with our suite of solutions can help ensure peak performance of onshore and offshore operations. A smarter, safer, simplified way to measure, monitor and manage upstream processes, Honeywell UPP Suite can help you power tomorrow with insights today.

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#### For more information

https://process.honeywell.com/us/en/home

#### **Honeywell Process Solutions**

2101 CityWest Blvd. Houston, TX 77042



