Honeywell Oil and Gas Solutions
Optimum Performance from Wellhead to Consumer

Discover More with Honeywell.
Discover More Value
A Portfolio that Delivers an Unmatched Combination of Performance, Efficiency and Safety.

Over the next 25 years, the demand for energy is expected to rise by 56%. Oil and gas will supply 80% of the world’s energy. This calls for solutions, expertise and technology that deliver optimum performance.

Safer and More Secure
Honeywell offers a broad and comprehensive set of solutions designed to protect people and facilities. Honeywell’s portfolio includes integrated control and safety systems, alarm management, cyber and physical security, fire and gas detection, personnel safety, and competence management programs. Our solutions offer a layered approach to safety, incorporating proven best practices for more effective operations across the entire facility, and enable our customers to be in compliance.

With increasingly stringent health, safety and security regulations, Honeywell’s Experion® Process Knowledge System (PKS) and SCADA system integrate seamlessly with Honeywell’s TÜV certified Safety Manager. An integrated architecture allows visualization of operations, engineering and maintenance data alongside plant safety information. This approach improves overall reliability and integrity of the plant, safeguarding against equipment failure and safety incidents.

Lean Capital Projects
Honeywell has revolutionized oil and gas automation and safety projects, and has achieved capital savings by as much as 30% by taking automation off the critical project path. Parallel engineering and standard cabinet design, along with three enabling technologies—Cloud Engineering, Universal Channel Technology, and Virtualization—are key elements of Honeywell’s lean automation engineering methodology, LEAP™.

Reduce Operating Costs
Honeywell products, software and services are designed to improve safety, reliability, productivity and efficiency. We’re always focused on helping our oil and gas customers reduce costs.

This focus starts in the control room with Experion PKS Orion. Every aspect of the operation can be integrated to improve operator situational awareness—eliminating unwanted downtime and improving performance over the lifetime of the assets. Combining this operating environment with our advanced software, smart instrumentation, custody transfer metering, and terminal and pipeline operations technologies, has transformed operations and business performance for oil and gas producers all over the world.

With our remote operations and maintenance solutions, you can leverage scarce expertise, make faster and more effective decisions, and achieve greater productivity. Above all, you can improve safety by removing personnel from hazardous environments, optimize your onshore or offshore assets, and increase uptime and productivity while keeping your costs under control.

150 Years of Expertise
Performance has been the hallmark of Honeywell technology for more than 150 years. From the first RMG gas valves in 1847, to the UOP thermal cracking process that set the foundation for oil refining in 1914, Honeywell has shaped the industry. Our SCADA and DCS systems in the 1970s set the standard for control. Today we are pioneering game-changing technology that enables you to extract more value out of your operations.
Discover Optimized Performance
Harness the Power of Data to Achieve Peak Performance.

All around the world, Honeywell is helping customers collect a vast array of data from their processes and assets, then transform that data into useful, actionable information. By enabling technology to automate work practices and integrate operations, assets are able to run at their competitive best.

Digital Intelligence
Honeywell Digital Suites for Oil and Gas combines Honeywell expertise in upstream production with our leadership in safety and performance. With Digital Suites technology, you can increase production performance and plant availability by up to 5%. Upstream producers can achieve higher uptime and improved productivity through better operating decisions with six new software suites based on proven and successful technology:
• Operational Data
• Equipment Effectiveness
• Production Excellence
• Process Safety
• Production Surveillance
• Operational Performance

Smart and Connected
Honeywell products, software and services can help you get the most out of your assets—lowest total cost of ownership and optimal maintenance extends the life of your assets. Our smart and connected systems and products all have enhanced data visualization and advanced asset monitoring capabilities.

The SmartLine™ family of transmitters, the newest and most advanced ultrasonic meter, the compact and easy-to-deploy RTU2020, our world-leading gas control equipment, tank gauging and terminal operations solutions, and our radically simplified Experion SCADA system, are all great examples of products designed to enhance your ability to maintain and monitor your operations.

Our software solutions help you cut through the complexity of multiple sources of data so that your operations staff can be more responsive and efficient.

Our People Help You Perform
Our connected, global team of experts brings our advanced technology to the industry and has the know-how to apply it.
• 5,000 engineers and scientists in research, customer consulting, product and software development
• 2,800 R&D employees
• 400 researchers with Ph.D.s
• 3,915 active patents
Discover Game-Changing Solutions and Technology

Smart, Integrated Solutions that Deliver Optimum Performance No Matter Where You Operate in the Oil and Gas Supply Chain.

Leverage our oil and gas expertise to achieve the results you need. Enjoy superior safety and improved recovery with stellar performance across the enterprise, all for the lowest total cost of ownership.

- Integrated Control and Safety Systems
- LEAP™ Revolutionizes Traditional Project Processes
- Industrial Security–Cyber, Perimeter and Video Surveillance
- Wireless Solutions-Network, Instrumentation and Mobility Tools
- Instrumentation and Metering Systems
- Safety Systems–Process and Emergency Shutdown and Fire & Gas Systems
- EHM, RCM and RBI Instrumentation and Tools
- Lifecycle Services

Control Room, Office and Site
We improve business performance by quickly and easily gathering data from all around the field and production facilities. Then, our solutions turn that data into useful information and make it available to decision makers in a clear and timely manner.

Solutions and Applications
- Supervisory Control/SCADA
- Alarm Management
- Systems Integration
- Planning and Scheduling
- MAC and H-MAC Contracting
- Real-time Process Optimization
- Process Design and Training Simulation
- Asset Management and Equipment Monitoring
- Advanced Control
- Personnel Address Systems
- Fire and Gas Systems
- Personnel Safety (Gas Detection/Location/PPE)
- Environmental Reporting Systems
- Pipeline and Compressor Simulation
- Operator Training
- Building Automation
- Security and Building Management

Onshore Production
In the fast-paced world of oil and gas production, decisions need to be made quickly and accurately. The new smaller and more complex onshore oilfields are more costly to develop and owner/operators are subject to increasing regulations and more stringent compliance activities.

Honeywell’s expertise on new capital projects results in low-risk startups and delivers a higher return on investment. Ongoing operations with Honeywell solutions increase reliability and efficiency, resulting in higher overall production.

Solutions and Applications
- Wellhead Automation
- Remote Wellhead Monitoring with Experion SCADA and RTU2020
- Tank Farm Management and Custody Transfer
- Pipeline Control and Monitoring Systems
- Pipeline Leak Detection and Corrosion Solutions
- Telemetry and Security
- Safety, Fire and Gas Systems
- Gas Metering and Product Loading Skids

Unconventional – SAGD
Honeywell has developed an end-to-end modular solution specifically for SAGD producers in oil sands which spans from well pad and CPF automation to collaborative well performance, addressing first production to market optimization.

Solutions and Applications
- Integrated Control and Safety System with built-in SIL3 Safety Controllers
- Remote Wellhead Monitoring and Control
- Environmental Management Applications
- SAGD-specific Performance Metrics
- Planning and Scheduling Applications
- Production Management Solutions
- Vertical Scaling

Sour Gas Development in Deserts of Abu Dhabi
Honeywell is providing the main automation system for one of the world’s largest developments. Our sophisticated wireless gas detection system integrates seamlessly with the Experion control system to maximize performance and safety across this large Greenfield project.

Coal Bed Methane Gas Fields in the Australian Outback
Honeywell is helping a leading gas company improve efficiency, uptime and safety with its Experion SCADA and RTU2020.

Large Gas Condensate Field and Pipeline in Kazakhstan
Honeywell is providing sustainable development, extending field applications that span from the wellheads to railcar and loading rigs, and improving control performance by introducing advanced control algorithms.
Pipelines
By integrating Experion SCADA with other Honeywell systems such as leak detection, security, fire and gas, and metering and measurement instruments, operators will have an enhanced view of critical data to improve both their productivity and responsiveness. From single instruments to turnkey solutions, Honeywell technology provides better asset integrity and capacity utilization, and accurate and compliant custody transfer.

Solutions and Applications
- Integrated SCADA, Control and Safety System
- Gas Nomination Management
- Volume Correctors
- Metering, Gas Chromatographs and Instrumentation
- Tank and Inventory Management
- Leak Detection
- Fiscal, Allocation and Check Metering
- Low-pressure Custody/Non-Custody Transfer
- Automated Truck, Train and Ship Loading
- Flow Correctors, Flow Computing and Meters

Storage
Because margins are tight and timing is everything in the business of storing oil and gas, Honeywell’s tank gauging and terminal automation solutions allow customers to respond quickly to market conditions, and utilize capacity without sacrificing accuracy or safety.
Honeywell designs, produces, commissions, services and maintains precise instruments for all types of tanks and storage caverns.

Solutions and Applications
- Terminal Operations Management
- ERP Integration
- Tank and Inventory Management
- Provers and Liquid Metering Skids
- Custody Transfer and Overfill Protection
- Loading, Blending and Additives Management
- Tank Safety and Security

Oil & Gas Processing
With more than 100 years of experience and the largest installed base in the world, Honeywell knows oil and gas processing. Honeywell expertise and technology transform oil and gas clean-up and processing, providing innovative technology for an unmatched combination of performance and safety.
Honeywell’s modular and integrated field solutions make it possible to process oil and gas close to the source, reducing cost throughout the supply chain. Operations are improved by Honeywell’s advanced production management portfolio that includes supply chain and performance optimization, simulation, asset, and operations management solutions.

Solutions and Applications
- Experion PKS Orion
- UOP Gas Cleanup Units, Design, Construction, and Consumables
- UOP Gas Processing Equipment
- Complete Gas Plant Design and Construction
- UOP-Russell Modular Gas Plants
- UOP Separex™ Membrane Systems, Twister Dew Point Controls
- UOP Selexol™ CO2 and H2S Removal Systems
- Gas Compressor Controls
- Compressor Modeling and Optimization
- TPI Security
- Integrated Safety and Fire & Gas Systems
- Flares, Burners and Heaters

Oil Transport from China’s West East Pipeline
Honeywell’s broad suite of products and solutions help customers guarantee both accuracy and compliance in custody transfer.

Gas Transport from China’s West East Pipeline
Honeywell’s broad suite of products and solutions help customers guarantee both accuracy and compliance in custody transfer.

Refinery in Sweden
Honeywell modernized one of Europe’s largest refineries with EHPM process controllers. The project significantly extends the life of the existing control system while tripling capacity of current controllers.

Oil Field Project in Iraq
Honeywell is improving control performance and operational safety by delivering a SIL-rated solution including DCS, Safety and F&G systems for the entire operations, including wellhead controls, the import pipeline, storage tanks, and site.

Tank Farms in Louisiana
Honeywell’s Gas Storage Solutions help producers be more productive in crowded conditions, be more productive with limited resources and deliver better service to their customers.

Discover Improved Safety, Accuracy and Productivity
Whenever You Need to Move, Measure or Store Oil and Gas, Turn to Honeywell for Safe, Reliable and Accurate Operations.
Discover Improved Capital Efficiency and Lower Risk

Oil demand, price volatility, the availability of oil and gas from new sources, and expanding production are factors compelling producers to look for effective capital investment efficiency and lower risk. Honeywell offshore customers are safer and more secure, with operations that are more efficient, productive and profitable because of our integrated solutions.

Offshore Production

Floating Production, Storage and Offloading (FPSO)
Whether your platform is a semi-submersible, tension leg, or FPSO, you will probably need ancillary marine solutions including positioning, loading/offloading and other solutions ranging from cargo and ballast systems to compact meter provers. Additionally, Honeywell understands that offshore production is dependent on the power it produces. No power, no production. Our automation portfolio includes everything from power management to environmental solutions that reduce CO2 and provide monitoring and reporting capabilities.

Solutions and Applications
- Integrated Control and Safety Interlock Systems/
  Fire & Gas Systems
- Thermal and Radar Surveillance
- Dynamic Positioning/Mooring and Wave Monitors
- Loading Computing/Cargo and Ballast Controls
- Gas Lift Control/Gas/Water Injection
- Well Monitoring
- Choke Control/Dual Completion Well Control
- Well Test Performance/Well Production Monitoring
- Downhole Monitoring

Platform Topside Process Control
With Honeywell’s Experion PKS, offshore customers can integrate and control FMC subsea equipment. Take advantage of standardized engineering templates and the certified native TPU722 driver to streamline your footprint and optimize operations of your subsea assets.

Solutions and Applications
- Gas/Oil/Water Separation Control
- Flow Control and Metering
- Compressor Control
- Gas/Oil Pipeline Monitoring and Control
- Well Test Control
- Water Treatment Control
- Subsea and Packaged Equipment Integration

Offshore Power Management
Honeywell’s Electrical Power Management System (EPMS) helps to provide reliable and steady electrical power supply in energy-intensive industries such as upstream oil and gas.

Solutions and Applications
- Turbine Generator Control
- Load Shedding Control
- Energy and CO2 Efficiency
- Energy Dashboards

Transportation (LNG Carriers)
When it comes to energy, supply and demand are rarely concentrated in the same place, so transportation is vital to ensuring the reliable and affordable flow of fuels around the globe. Transporters of oil and gas count on Honeywell for safe, reliable and accurate hydrocarbon transportation logistics.

Honeywell provides a broad suite of products and solutions that help the transporters of oil and gas deliver their cargo reliably, efficiently and safely.

Solutions and Applications
- Integrated Control and Safety System Covering Hull/Topides
- Ballast Control
- Tank Gauging Cargo Custody Transfer Systems
- Sampling Gas Detection System for Cargo Area
- Addressable Fire System for Accommodations
- Security Solutions
- Production Planning and Scheduling Applications, Ship Scheduling and Nominations
- LNG Containment Foam Blowing Agents (performance materials)
- Loading and Unloading Systems
For More Information
To learn more about Honeywell's Oil and Gas Solutions, visit www.honeywellprocess.com/oilandgas or contact your Honeywell account manager.

Honeywell Process Solutions
Honeywell
1250 West Sam Houston Parkway South
Houston, TX 77042
Honeywell House, Arlington Business Park
Bracknell, Berkshire, England RG12 1EB
Shanghai City Centre, 100 Zunyi Road
Shanghai, China 20051
www.honeywellprocess.com