

A black and white photograph of an industrial refinery or oil processing plant. The scene is filled with complex machinery, including large pipes, metal walkways, and a prominent tall distillation column on the right side. The sky is overcast with soft, diffused light. The overall tone is industrial and professional.

# + Achieve the full potential of your oil & gas assets

INTELLIGENT ACTION FROM RESERVOIR TO REFINERY

**sensia**

Rockwell Automation + Schlumberger

# + Working tirelessly to overcome the automation challenges of oil & gas: one by one

**We collaborate with all stakeholders to make the production, transportation and processing of oil & gas simpler, safer, more secure, more productive and better understood from end to end.**

Sensia is making the advantages of industrial-scale digitalization and seamless automation available to every oil & gas company. Now every asset can operate more productively and more profitably.

## **THE UNIFICATION OF SENSING, INTELLIGENCE AND ACTION**

Sensia brings together the best of the best: the pioneering process automation and safety, real-time control and IoT technologies of Rockwell Automation, combined with the unmatched measurement and instrumentation, software and analytics capabilities of Schlumberger. Sensia is further strengthened by the oil and gas domain expertise and artificial lift experience shared by both parent companies.

The result is Sensia—the leading automation specialist in oil & gas production, transportation and processing with a team of 1,000+ experts serving customers globally.



**IRREDUCIBLE SIMPLICITY**

Bringing the advantages of industrial automation to the oil & gas arena involves a series of highly complex challenges.

At Sensia, we respond to every challenge with exactly what's needed to solve the problem: nothing more, nothing less.

As a result, we are creating self-contained solutions – the perfect point of balance, not over complicated or oversimplified.

This is irreducible simplicity. **This is Sensia.**

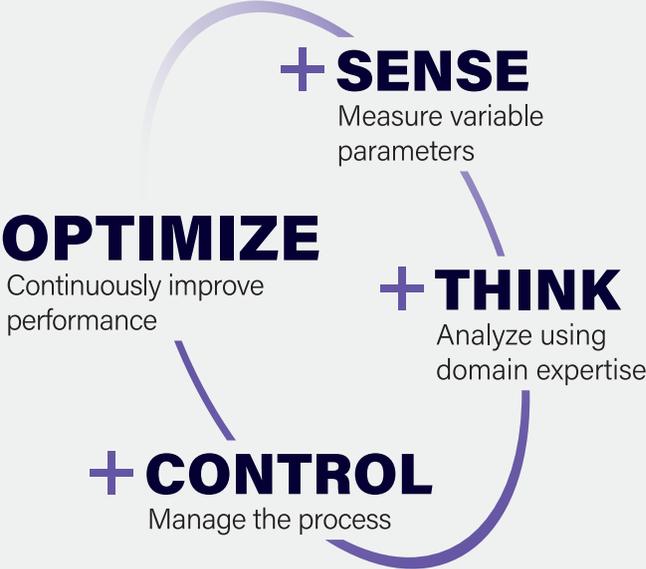
**+ SENSIA IS ONE COMPANY  
+ WITH ONE IDENTITY  
+ WORKING AS ONE TEAM  
+ COMMITTED TO ONE GOAL**

OUR PROPOSITION TO THE OIL & GAS MARKET  
IS TRULY DIFFERENTIATED

# We are focused

## INTELLIGENT ACTION

Sensia unifies measurements, intelligence and action to optimize decisions and dramatically reduce the time and interactions between detection, diagnosis and resolution. With Sensia products, systems and solutions, months and days can become minutes and seconds.



## BRINGING THE ADVANTAGES OF INDUSTRIAL AUTOMATION TO THE OIL & GAS ARENA INVOLVES A SERIES OF HIGHLY COMPLEX CHALLENGES

At Sensia we respond to every challenge with exactly what's needed to solve the problem: nothing more, nothing less.

**This is irreducible simplicity. This is Sensia.**

### + SENSE

Measure dynamic properties within live oil & gas environments to acquire data for transmission and/or evaluation

### + THINK

Apply domain intelligence (via human or analytical systems) to incoming data streams to extract meaning, detect events and diagnose issues

### + CONTROL

Automatically instruct connected mechanical systems and other networked/remote devices to take precise action in response to interpreted inputs

### OPTIMIZE

Achieve an ideal state of operational balance where systems perform at maximum efficiency, continually and sustainably

**SENSIA REDUCES RISK, DRIVES EFFICIENCY, AND OPTIMIZES PERFORMANCE, SO OUR CLIENTS AND THEIR STAKEHOLDERS CAN ACHIEVE THE FULL POTENTIAL OF THEIR OIL & GAS ASSETS**

# **+ From reservoir to refinery**

- + OPERATIONAL CERTAINTY**
- + UPTIME**
- + OPTIMIZE ASSET UTILIZATION**
- + IMPROVE SAFETY**
- + INCREASE OUTPUT**
- + EXTEND LIFE**



### **OIL & GAS PRODUCTION SOLUTIONS**

Our unified solutions bring together measurement, software and automation in ways that have the greatest effect on production results.



### **OIL & GAS TRANSPORTATION AND STORAGE SOLUTIONS**

Sensia combines hydrocarbon flow knowledge with process control and safety system expertise to create scalable automation solutions that address the extent and complexity of oil & gas transport operations.



### **OIL & GAS PROCESSING SOLUTIONS**

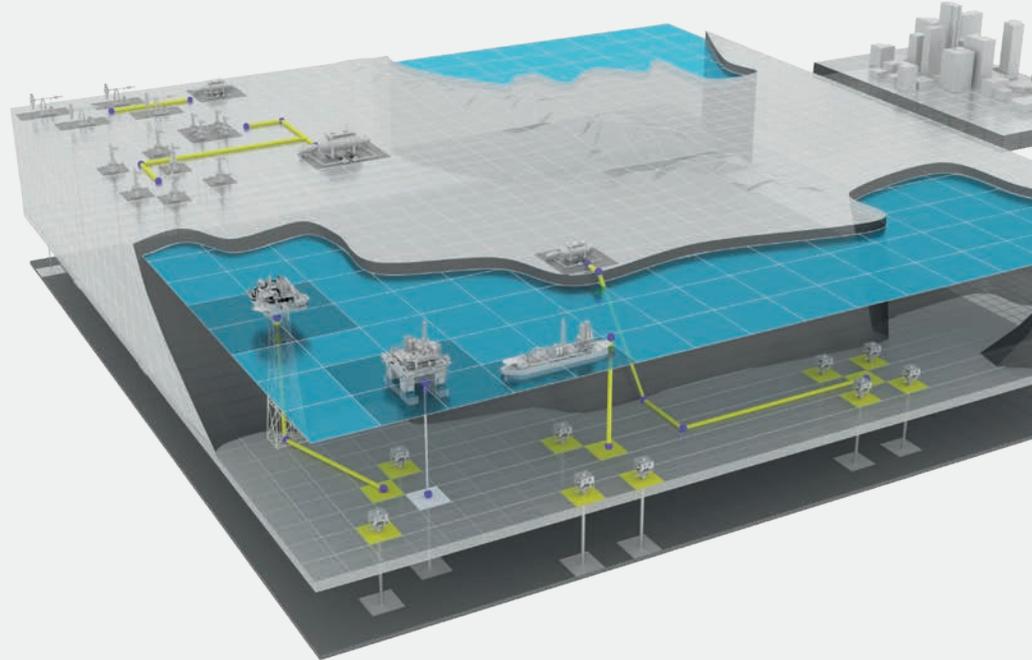
From gas processing facilities to oil refineries and LNG plants Sensia is helping global customers increase operational effectiveness, maintain safety, and optimize processes.

## OIL & GAS PRODUCTION

# Bring us your oil & gas production challenges

On and offshore, the production improvements available through intelligent automation deliver greater operational efficiency and asset productivity.

Our unified solutions bring together measurement, software and automation in ways that have the greatest effect on production results. Work with Sensia to reduce your energy consumption, realize the true potential of legacy systems and make better use of your operational and performance data.





## **LAND**

### **Lower costs, greater operational effectiveness**

Today's engineers face numerous challenges to keep wells and fields running safely, efficiently and performing cost effectively as assets mature and the market shifts. From automating artificial lift systems in single wells to complex multi-well pad production scenarios, Sensia brings decades of experience of serving the global oil & gas industry, and one of the largest installed bases in the market.

Field-proven technologies combine hardware with digital innovations such as Cloud connectivity and process virtualization to bring the advantages of seamless automation to every oil & gas company.



## **OFFSHORE**

### **Higher reliability meets operational visibility**

As your experienced Main Automation Contractor, Sensia's solutions-focused, knowledgeable, and certified offshore engineering team provides modular and turnkey projects, backed by lifetime support services.

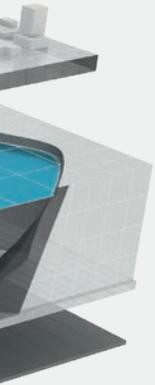
Our extensive portfolio has performed reliably for decades in demanding conditions and against space and weight restrictions offshore. Integration is simplified using open systems to unify subsea and topside environments, automating activities such as process control and motor control to bring process and power efficiency gains to your topsides. With your operational infrastructure integrated by Sensia you have access to analytical tools that provide new visibility, accelerate decision making, reduce costs and improve production performance.



## **SUBSEA**

### **Long-term reliability where it counts**

Subsea systems and equipment are engineered to operate continually in extremes of depth, temperature, and strong currents. Inaccessibility means that the impact of any subsea equipment failure – resulting in lost production and complex remediation – is costly. High reliability architectures and reduced maintenance programs are critical components for any subsea operator. Sensia leads the industry with subsea automation, control, and safety systems. Our SIL-rated product portfolio and exceptional scan rates to meet the demand needs of HPPs and OPP systems offshore. Field-proven technologies combine hardware with digital innovations such as Cloud connectivity and process virtualization to bring the advantages of seamless automation to every oil and gas company.

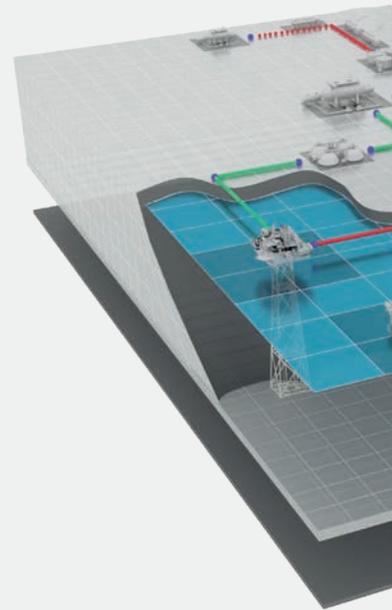


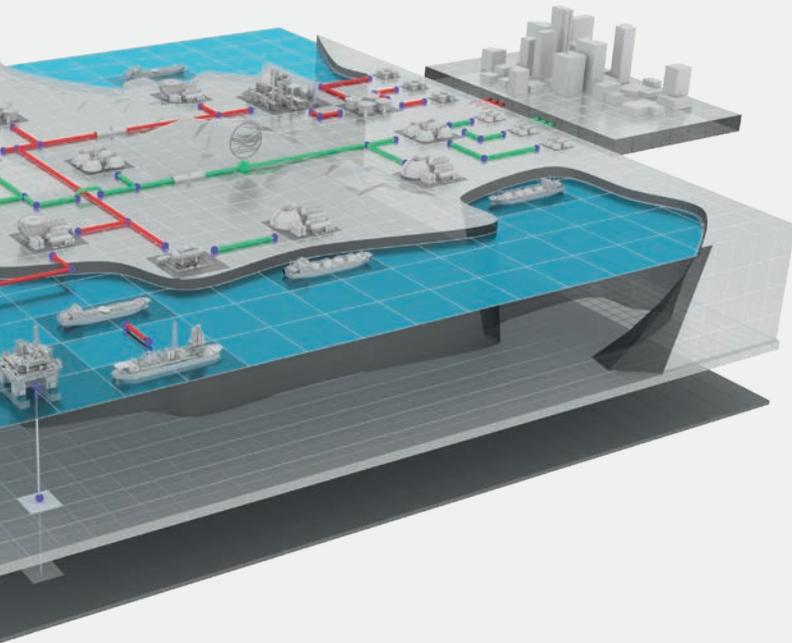
## OIL & GAS TRANSPORTATION AND STORAGE

# Challenge is the starting point for every achievement

We bring value to new and the millions of miles of existing pipelines to help meet rising demands for transporting oil, gas, and petroleum products.

Whether your pipelines are remote and unmanned or pass near densely-populated areas, the ability to keep product flowing 24/7 and stored safely is critical. Sensia combines hydrocarbon flow knowledge with process control and safety system expertise to create scalable automation solutions that address the extent and complexity of your transport operations.





## **OIL TRANSPORT**

### **Close the gap between detection and correction**

Track the movement and quality of oil from wellhead to refinery. Sensia also helps operators automate activities such as pipeline surveillance and offers a range of flow metering systems that ensure accurate liquid custody transfer around the clock. Beyond pipelines, our automation solutions integrate control, power and data systems for the efficient management of oil terminals and storage tanks.



## **GAS TRANSPORT**

### **Quick wins for the long game**

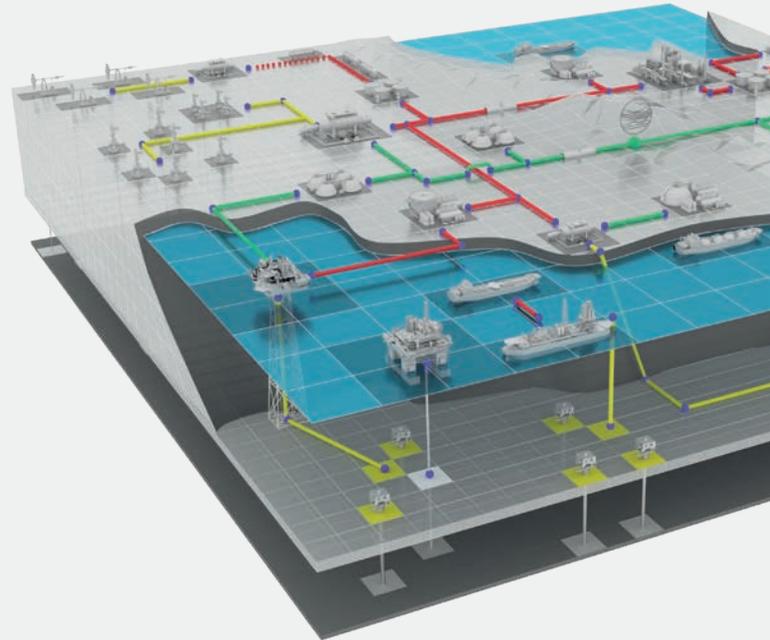
Customers can achieve quick wins by introducing plug-and-play systems for the accurate measurement of gas quality and quantity. Sensia pipeline solutions provide controls and analytics that improve the uptime, safety, and energy consumption of your gas transport assets such as compressors and pump stations. Call on our expertise in new pipeline construction, as well as experience with existing system upgrades.

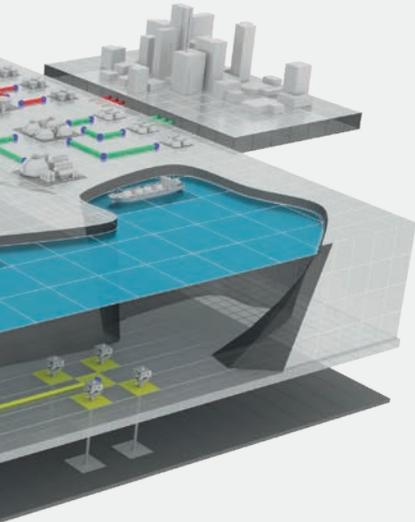
## OIL & GAS PROCESS

# Just right

Many of the disparate systems controlling processes, measuring fluids and performing other functions were never designed to communicate, leaving your teams to keep them working together.

Sensia helps you remedy this, with integrated solutions that introduce intelligent automation. Our knowledgeable engineers and project managers understand your issues and exactly what's needed; designing open solutions that keep production levels high. From oil refineries to LNG regasification facilities Sensia has helped global customers increase operational effectiveness, maintain safety, and optimize processes.





### **MEET PERFORMANCE OBJECTIVES** **Oil Refineries and Processing Facilities**

Keeping oil refineries and processing plants or facilities productive, efficient and safe calls for tight control over processes, combined with round-the-clock access to operational insight. It's a challenge now being met by the application of intelligent automation. Building on more than 50 years' experience in working with processing facilities, Sensia can help you design, seamlessly deploy, and maintain the ideal system for your operations.



### **ADD AUTOMATION, NOT COMPLICATION** **Gas Liquification Plants and LNG Regasification**

To be able to promptly respond to fluctuations in demand and price, gas facilities must optimize yield, minimize downtime and operational costs; all without introducing risk. Improving plant efficiency while increasing throughput is possible without a complete plant overhaul. These efficiencies can come from systems integration – uniting your plant's information, control and power systems to enable intelligent automation. Sensia provides world-class natural gas processing automation systems – we can automate end-to-end compression and separation processes, the control of specific plant equipment and the management of plant performance data. Sensia solutions meet stringent process control requirements, while being reliable and scalable.

**AT ANY SCALE FROM INDIVIDUAL SENSORS, INTEGRATED SYSTEMS  
TO FIELD-WIDE ENGINEERED SOLUTIONS SENSIA DELIVERS**

# Oil & gas automation to minimize risk, improve efficiency and enhance performance

## **SENSIA PROCESS AUTOMATION**

Sensia Process Automation takes the latest control and information technologies available and combines them with the broad domain expertise, technology and product portfolio of its parent companies to provide state of the art, digitally enabled process control and safety automation solutions across the oil & gas value chain.

Sensia delivers engineered modular and turnkey automation solutions to manage costs, maximize

up-time and extract the most value possible from new and existing assets and to maintain the safety of your personnel, assets, and the environment in which you operate.

We spend time to fully understand your process, control and safety needs to engineer scalable solutions that reduce safety shutdowns, improve performance and help oil & gas operators remain competitive.



### **Modular automation systems**

- Plug and play integrated systems
- + Integrated process control, power control and safety systems (ICPSS)
- + Safety instrumented system (SIS)
- + Terminal automation systems
- + Power and Motor control systems



### **Services**

- + Automation advisory services
- + Main Automation Contractor [MAC]
- + MAC for OEM
- + Engineering services
- + Electrical Consulting Services
- + Support services
- + Training



### **Brands**

- + Intellicenter – Intelligent Motor control center\*
- + PowerFlex – Variable speed drive\*
- + PlantPAX – Distributed control system\*
- + Contrologix\*
- + Trusted\*
- + AADvance\*
- + Sensia – remote terminal units and wireless instruments [vMonitor]

\*Accessible Rockwell technology, Allen Bradley technology

**SENSIA DELIVERS**

# A history of setting the standard. A future of raising the bar

## **SENSIA MEASUREMENT SYSTEMS**

Measurement data is a vital input for any control, automation or optimization system. However, unlike many other processes, oil and gas measurement presents unique challenges that demand careful technology selection for the fluid conditions and application. Sensia Measurement Systems provides proven flow measurement products, engineered systems and services specifically for the oil & gas industry. Our experts bring their specialist domain expertise to help select the right solution with performance appropriate for the application to ensure it meets your business, measurement and optimization goals.

Sensia measurement technology enables our customers to digitalize, automate and optimize the production, transportation and processing of oil and gas, as well as providing auditable and traceable measurements for fiscal, custody transfer and allocation management. Our solutions range from stand-alone flow meters to fully integrated systems that are compliant with any applicable standards and configured to meet the needs of your application whilst delivering a rapid return on investment.

Our large installed base of technology from market leading brands such as Caldon, Jiskoot, Barton and Nuflo are field-proven and internationally recognized as best in class.



### **Integrated systems**

- + Custody transfer metering
- + Crude oil and condensate sampling
- + Automated in-line oil blending
- + Wellpad control & distributed measurement
- + LNG sampling and metering
- + HIPPS



### **Product portfolio**

- + Custody transfer flow meters
- + Process flow meters
- + Flow meter totalizers
- + Flow computers and controllers
- + Chart recorders and DP devices
- + Oil & gas samplers



### **Services**

- + Sampling & measurement consultancy
- + Site surveys and system health checks
- + Application assessments and scope design
- + Field service, technical support & repair
- + Expert customer training



### **Brands**

- + Barton
- + Caldon
- + Jiskoot
- + NuFlo
- + vMonitor

**SENSIA DELIVERS**

# Bring the advantages of industrial-scale automation to lift

## **SENSIA LIFT CONTROL SYSTEMS**

Lift controls are the interface between production and the actions that address issues and improve performance. Automating lift with Sensia introduces new capabilities that make more cost-effective use of operational resources, assets and power, enabling the most effective recovery at the lowest cost.

Sensia Lift Control Systems brings a unique operations-first approach to automation that starts with how you lift and scales up to enable production management across multiple wells in real time.

### **Add automation not complication**

Sensia experts work with you to simplify automation infrastructure – and aim to deliver the fastest returns

from the lifting systems you already have in place. It's an approach that allows operators to reduce system replacement and upgrade spend, eliminate switching costs, maximize pump life and ultimately extend field life.

Our solutions are engineered to get variable speed drives, controllers, instrumentation systems and communications all working together in one unified environment. With everything sharing a common framework, Sensia customers can quickly visualize equipment status and performance across the entire lift system to understand operating conditions and quickly take action to keep production on track.



## BRANDS

### ESP

- + SpeedStar – The industry's leading VSD
- + Instruct – Controller

### SRP

- + Sensia VSD
- + OptiLift – Drive + Controller [Rod pumps]

### PCP

- + KUDU PCP Manager – Drive + controller. The authority in PCP and HPU control
  - + Surveillance and monitoring
  - + Field Connectivity
  - + Power systems consulting

### Well surveillance

- + LiftIQ surveillance software and field connectivity infrastructure

**SENSIA DELIVERS**

# Reducing the time between detection and correction

## **SENSIA DIGITAL SOLUTIONS**

Sensia Digital Solutions improve oil & gas operations and engineering workflows by combining domain knowledge, market leading software, and proven automation systems for the most efficient, proactive management of your oil & gas assets.

Sensia Digital Solutions uniquely take advantage of our leading petrotechnical software, cloud connectivity, data ecosystems and analytics to overcome today's oil & gas challenges. By connecting subsurface assets with field equipment, network infrastructure and communications, operators can assess the current state of production system performance from wherever they are - from the reservoir to the refinery.

Real-time measurements are automatically collected, combined with multiple data sources, interpreted using built-in analysis systems and visualized to provide insights and smart recommendations. From reservoir to refinery, personnel can now respond to issues as soon as they arise to maximize production, reduce cost, eliminate shortfalls and minimize HSE impact.

The industry-leading digital solutions we offer are relied upon daily by thousands of engineers worldwide to understand the health of their production assets, to hit production targets consistently, and to assure the safe delivery of oil & gas products to the point of transfer.



**Brands**

- + ConnectedProduction
- + OFM
- + Avocet

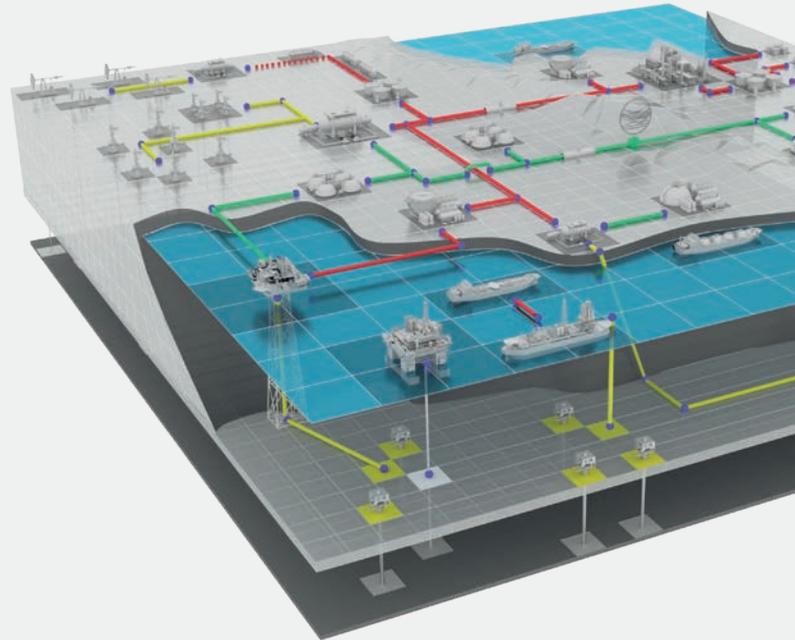
# The Sensia difference

## **OPEN CONNECTED TECHNOLOGY PLATFORM**

Our digital architecture creates a unified technology platform that enables the solving of automation and optimization challenges at the same time. The architecture provides a simple and consistent approach to automation which easy to deploy and adjust. With one platform that connects sensors, cloud, assets, applications and people it creates an environment in which to orchestrate activities across the organization.

## **GLOBAL SERVICE ORGANIZATION**

Reflecting the international nature of oil & gas, Sensia operates a global service organization that includes an international network of petrotechnical experts, process engineers, technicians, facilities and distribution centers. Whether customers require an individual part, remote assistance, or a planned maintenance visit, Sensia offers lifecycle service options designed to help drive out downtime.





### **DOMAIN KNOWLEDGE**

Sensia people hold specialist expertise in a range of key fields. Our cross-discipline teams share access to unparalleled reservoir knowledge, industrial automation as well as specialized experience of different production settings, process operations, and the transport and measurement of oil & gas. This vital combination of breadth and depth helps Sensia understand a customer's challenge from every angle, to design and deliver the most comprehensive solution.

### **TECHNOLOGY**

Sensia leadership has committed to continuous ongoing technology investment, as well as defining the direction of R&D activities and engineering best practices. By leveraging the combined technology portfolios of Rockwell Automation and Schlumberger, we are creating the definitive platform for the automation of oil & gas operations. The result will be greater alignment between individual contributors, accelerating the creation of standardized, fully integrated solutions.

### **SCALABLE SOLUTIONS DELIVERY**

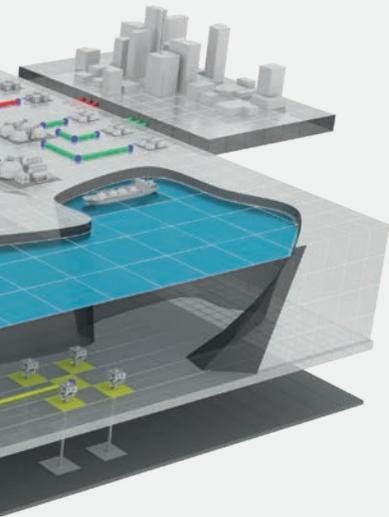
Sensia customers can configure the level of services to suit their operations, and scale it as priorities change over the life of each asset. From installing a remote terminal to acting as your main automation contractor, we have a proven capability to scale what we deliver to respond to unique customer requirements.

### **LEADING AND RECOGNIZED BRANDS**

Sensia combines an unrivaled portfolio of leading oil & gas technology brands. These field-proven technologies and capabilities will be unified and automated via a unique common ecosystem.

### **OUR HERITAGE**

Although a new company, Sensia has emerged from the leaders in oilfield services and industrial automation, with a track record of success. From day one, we will have the experience, footprint, capabilities and resources that make us uniquely placed to bring the advantages of industrial-scale digitalization and seamless automation available to every oil & gas company.



[sensiaglobal.com](https://sensiaglobal.com)

© 2019. Sensia LLC, Houston, Texas