



ROXAR FLOW MEASUREMENT AS

Vision:

Be the recognised global leader
in innovative upstream
instrumentation solutions

Mission:

We will pursue long term profitable
growth by enabling our customers to
achieve optimal oil & gas production
through offering professionally
delivered solutions and services

Roxar offers software for reservoir interpretation, modelling and simulation, as well as instrumentation for well planning, monitoring and metering. Roxar has two main divisions; Software Solutions and Flow Measurement.



Putting the Operator in Control

- An Integrated, Reservoir Lifecycle Approach

Roxar Flow Measurement's service offering



Roxar provides reservoir management solutions that span the entire reservoir value chain from seismic interpretation and modelling through to the very latest in production optimisation - what we describe as Integrated Reservoir Production Management.

What does this reservoir lifecycle approach mean to the operator?

It means an integrated and seamless workflow which captures knowledge about the reservoir, enables you to disseminate and share best practices, and increases both people and reservoir productivity.

It means the intelligent managing of data to ensure better decision-making at all levels. With a single oil or gas field able to generate up to a thousand gigabytes of data per day, managing and extracting maximum value from this data has never been more important.

And it means the perfect combination of predictive software and real-time instrumentation, giving you a complete understanding of reservoir characteristics and the information that will ultimately increase your recovery factor.

- Require more information on the fluid composition from the well?
- Looking to create an intelligent network of downhole sensors or alleviate erosion concerns?
- Wanting to reduce the uncertainty inherent in developing your hydrocarbon reservoir?

Our complete solution puts you in control of the production process.



Our Solutions

- A One-Stop Technology Supplier

Roxar is one of the world's leading technology suppliers to the oil and gas industry. The use of Roxar technology enables our users to increase oil and gas recovery, accelerate production and reduce capital and operating costs.

Our product portfolio includes instrumentation for topside, subsea and downhole monitoring:

- Our permanent **downhole instrumentation** provides continuous reservoir surveillance, ensuring that every producing well is managed for maximum performance.
- Our industry leading **subsea monitoring and measurement solutions**, including our multiphase meters, chemical injection valves and ROV retrieval systems, are helping to close the subsea/topside information gap.
- Our **multiphase meters** have become a highly effective alternative to well testing and a critical component in measuring flow and production rates.
- Our **flow assurance** portfolio includes measurement input, injection control, and corrosion/erosion monitoring to protect pipeline integrity and prevent production interruptions.
- And our **data acquisition solutions** ensure that all the information generated is turned into genuine business value and is a key input into operational decisions.

Backed up by an unrivalled commitment to R&D, world-class manufacturing facilities, and the very best in customer service, we provide a complete reservoir management solution.



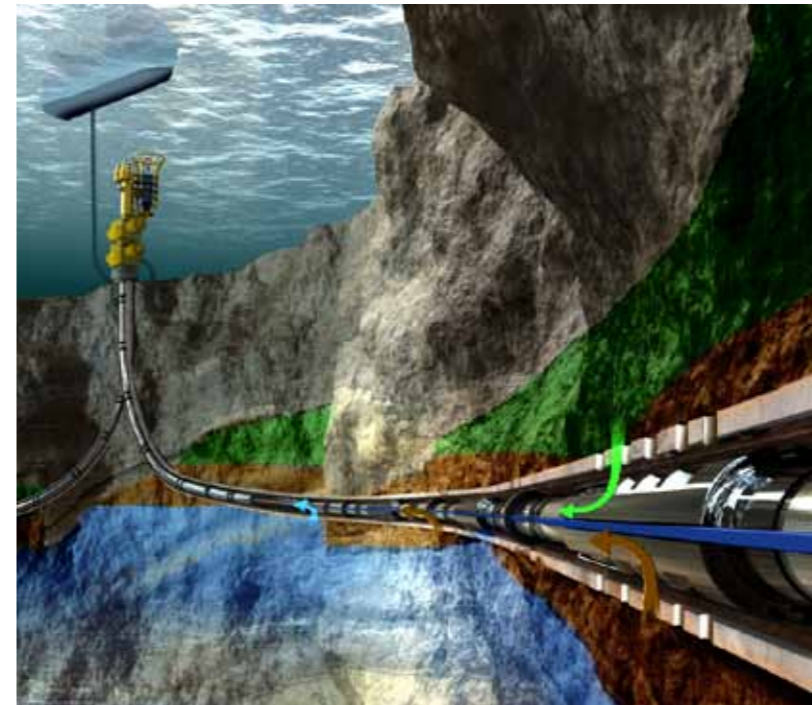
THE INDUSTRIAL INVENTOR

Roxar is the industrial inventor of multiphase meters, sand monitors and wet gas meters with continuous water measurement. We are the leading global supplier of world class flow meters as well as robust downhole instrumentation and controls.

Roxar downhole Monitoring & Control



Roxar's permanent downhole instrumentation provides continuous reservoir surveillance for production optimisation and reservoir management without the need for intervention.



Roxar downhole HM/HS gauge

The pressure and temperature data from the Roxar downhole HS and HM gauges, are used, among other things, to help update reservoir models and optimise production rates. To date, more than 1000 wells have been successfully installed with Roxar's downhole instrumentation.

Roxar's downhole monitoring solutions, installed worldwide since 1987, generate vital information so that every producing well can operate at maximum performance. With the high costs associated with planning and drilling wells, this has never been more important.

Our downhole monitoring solutions portfolio is spearheaded by the Roxar PDMS (Permanent Downhole Monitoring System), providing reliable real-time data from any location and improving reservoir management, well planning and resource exploitation.

Elements of the PDMS include our series of pressure and temperature gauges and the latest Roxar HS gauge.

All instruments are fully proven in high temperature reservoirs and designed for the most extreme well conditions.

Roxar PDMS is deployed in production, injection and observation wells, as well as in conjunction with the instrumentation of highly complex multi-zone intelligent wells.

Alongside Roxar PDMS, is our intelligent downhole network. By allowing

operators to install 32 instruments on a single cable, the intelligent network acts as a hub for downhole choke position indicators, future Roxar measurement devices and third party sensors, and for the transmission of power and data. Downhole sensors are utilised not only to monitor

temperature, pressure and water cut, but also gas fraction, sand rate and flow velocity.

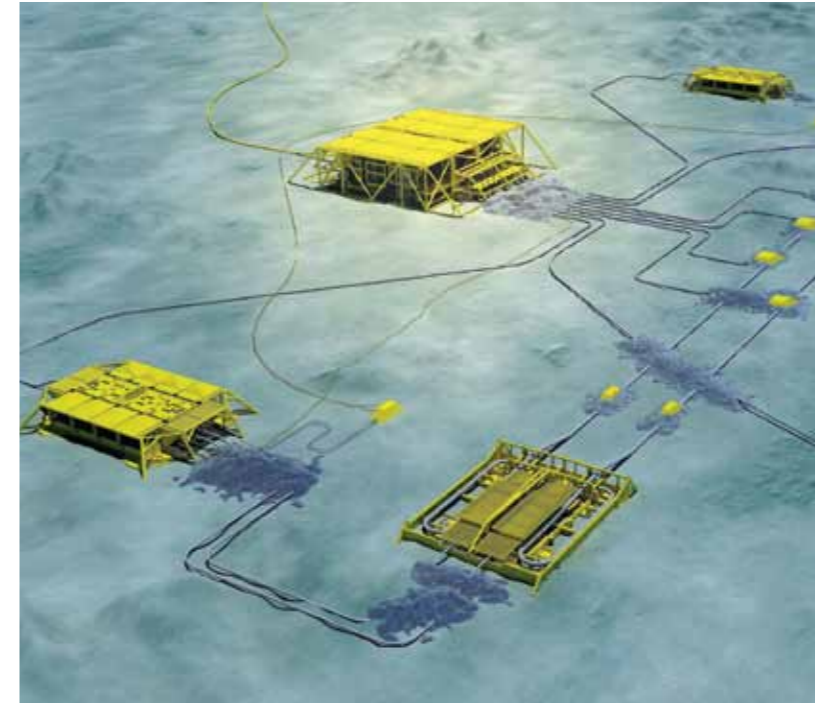
The result is a complete downhole picture of the reservoir for real-time decision-making.

Roxar subsea Monitoring and Control



2010

Some of the world's leading E&P companies are partnering with Roxar in providing a fully ROV retrieval system for subsea instrumentation.



1996

Roxar installed the first subsea meter in 1996 and this meter is still in operation today. The most important deliverables from a subsea meter are reliability, measurement quality and maximum uptime.

One of the biggest challenges facing subsea wells today is the lack of information compared to their topside counterparts. With more than 15-years subsea track record and as the world's leading provider of subsea instrumentation, Roxar is ideally placed to close this information gap. The Roxar subsea Multiphase

meter and the Roxar subsea Wetgas meter are designed to continuously measure the flow rates of oil, water and gas in the well stream without the need for separation.

The subsea meters have field proven performance and a track record of continuous operation since 1996.

The light weight and compact design allows for easy installation in the jumper, manifold or production tree.

By installing Roxar subsea meters the operator can safely omit laying costly subsea test lines and still be in full control of the well production.

The meters can also be integrated with our sand monitors and pig detectors to provide a complete subsea monitoring solution.

The subsea Chemical Injection valves have strengthened our subsea portfolio even further. The new high flow valve has been designed for maximum robustness and reliability

with the material especially selected to reduce erosion and abrasion risk.

And if that wasn't enough, our new subsea ROV retrieval system, which is being developed in a Demo2000 joint industry project with BP, Chevron, Shell, Statoil and Total, retrieves subsea instrumentation within the

most complex of subsea production systems with no impact on either production or the environment.

Just the latest in a host of new innovations from Roxar that are transforming the industry, providing production control to the operator, and closing the subsea information gap.

Production Monitoring

- Multiphase Meters



In February 2009, Roxar launched its third generation multiphase meter - the Roxar MPFM 2600 based on its new Zector® Technology.

The meter is another significant milestone for a company that has been responsible for some of the key milestones in multiphase metering over the last 25 years.



The Zector® Technology:

- Voxel-based signal processing
- DP26 Electrode geometry sensor
- New field electronics system

The MPFM 2600 was evaluated at the TUV NEL Test Facilities, Scotland, 2009 -
"The meter performed extremely well on liquid flow, gas flow and liquid watercut."

Roxar's production and process solutions are designed to help you derive maximum benefit and reservoir performance from your real-time production data.

Roxar's multiphase meters provide instantaneous and continuous well and flow rate information, helping you indicate which wells need attention, which wells may

produce more, and where new and more efficient wells should be drilled.

The meters also play a key role in making brownfields more economically viable through increased well testing.

Roxar's third generation multiphase meter, the Roxar MPFM 2600 based on its new

Zector® Technology, comes with the very latest performance, flexibility and robustness.

Performance: The MPFM 2600 provides highly accurate three phase readings covering all flow regimes including slug flow. Its flow pattern recognition and near wall measurements result in superior phase

fraction determinations and its dual velocity technology allows gas and liquid velocity to be measured independently.

Flexibility: At 130 kg in weight and 65 cm in length, the MPFM 2600 provides unrivalled compactness and flexibility. The meter comes with a field replaceable insert venturi, enlarging its operating range, and has an

interchangeable gamma and non-radioactive version. It can operate at the highest gas volume fractions (GVF), including the wet gas range.

Robustness: From deserts to offshore to tropical or arctic conditions, the MPFM 2600 and other Roxar multiphase meters operate in all environments and process conditions. These include

heavy oil, sour service environments and high or low operating pressures.

The MPFM 2600 comes with the latest client-server based Fieldwatch console software for turning raw data into valuable decision-making information and the ability to integrate with other intelligent reservoir devices.

Production Monitoring

- A Complete Flow Assurance Solution

Enhanced production is also about flow assurance.

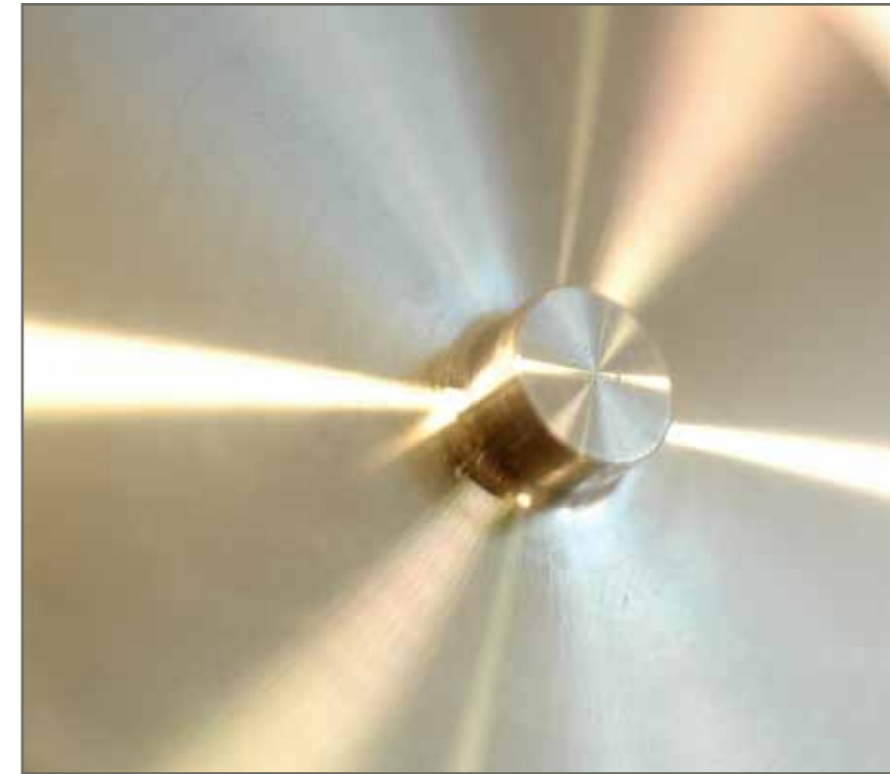
Whether it be scaling, saline and unchecked water, sand build-up, or metal loss within pipelines, Roxar provides a complete flow assurance solution. A solution which can predict, alert, measure, and control all flow assurance challenges and realise one single goal – uninterrupted and maximised production.

Our flow assurance solutions fall into three categories – Measurement Input, Injection Control, and Corrosion/Erosion Monitoring.

Measurement inputs

In wet gas fields, formation water can have a huge impact on production, leading to the scaling and corrosion of pipelines, and a significant reduction in well efficiencies.

The Roxar Wetgas meter is the only available meter with the online and direct measurement of water in a wet gas flow, allowing you to take preventative action, such as injecting corrosion inhibitor, choking the well, or instigating zonal isolation. Today, the meter is providing crucial measurement input to flow assurance in some of the world's leading fields, including Ormen Lange and the Independence Hub.



Injection control

Chemical injection control is another important area of flow assurance and again we are rising to the challenge, helping operators control flow and dosage rates in subsea chemical injection applications with the highest degree of precision.

Having invented the throttle valve back in 1990, delivered the first remotely operated injection valve to BP in 1997, and first fully automated constant flow injection valve to Statoil in 2002, our subsea injection valves today provide the very best in reliability, accurate dosage control, extended flow ranges, and compact designs. Roxar's latest subsea Chemical Injection valve - the high flow valve based on a single compact ROV fully retrievable unit, provides all the features of the choke, singlephase meter and pressure sensors, providing robust and accurate dosage control and operating in extended flow ranges.

Flow Assurance and Pipeline Integrity Monitoring

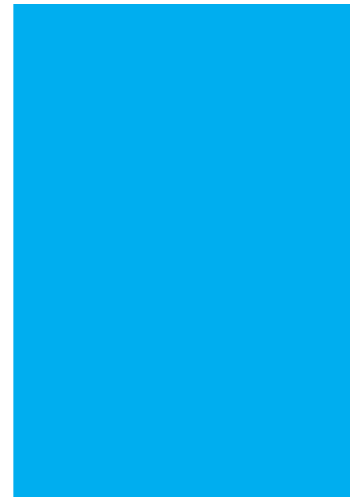
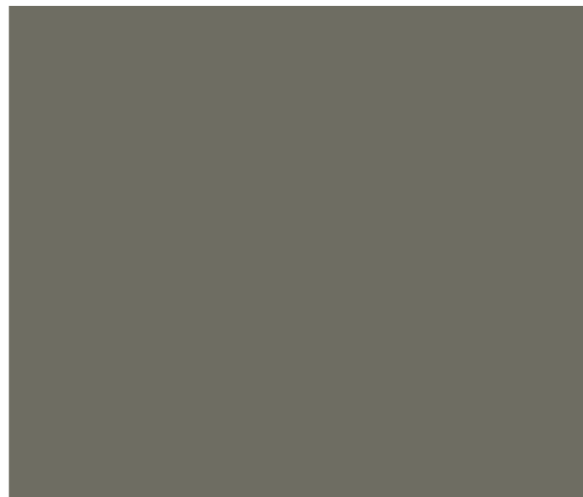
Corrosion & erosion monitoring

As much as 1% of total operating costs in the oil & gas industry could be saved through effective corrosion technology.

Roxar is an industry leader in corrosion and erosion monitoring. Our real-time Field Signature Method (FSM) technology can detect corrosion in a wide variety of different and often challenging applications. By inducing an electrical current into strategically located pipe sections, changes in the electrical field pattern can be monitored and the slightest initial signs of metal loss through uniform and localised corrosion can be identified at an early stage.

Sand is another barrier to flow assurance – as a major contributor to corrosion by removing protecting coatings and as a factor behind production equipment being clogged and wellbore access impeded. Our acoustic-based sand monitoring and sand erosion sensors provide an 'early warning' system to the operator - an immediate response when sand is present, reaping an instant economic dividend to the operator.

From multiphase meters to chemical injection valves to non-intrusive corrosion and sand erosion monitors and sensors, Roxar provides operators with a continuous stream of measurement, production and flow assurance data - all integral to real-time decision-making.



From Data Validation to Production Optimisation

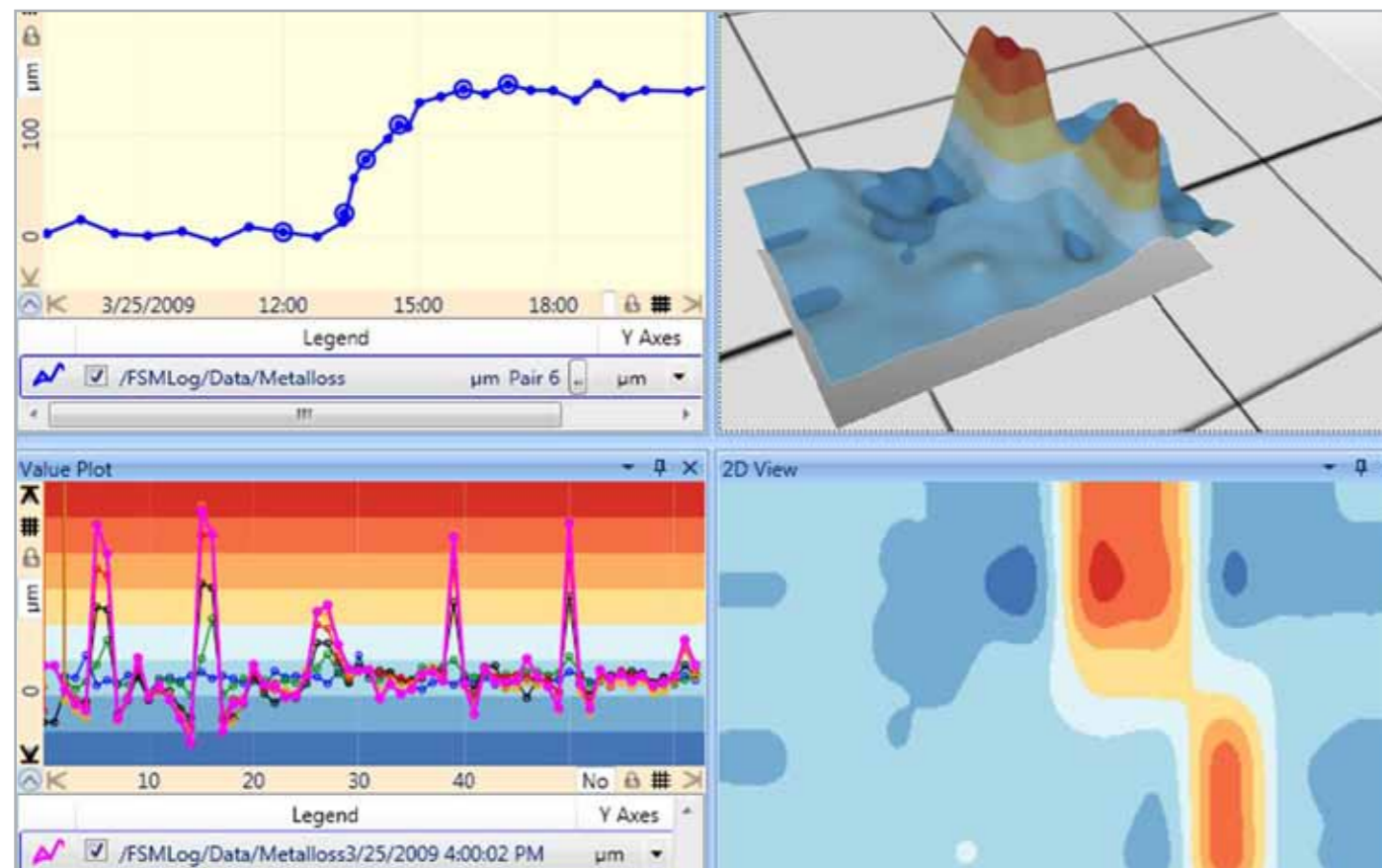
Turning information into value requires advanced data monitoring, management and analysis tools.

Roxar Fieldwatch, the standard operator interface software for all our instrumentation, providing state-of-the-art monitoring and analysis, giving the operator a complete picture of the reservoir.

The Roxar Fieldwatch software is designed to work with singular or multiple Roxar meters, sensors and gauges. When combining the Roxar Fieldwatch basic and instrument modules with specialised modules for flow assurance and production optimisation, it becomes a

specialised field monitoring system giving the operator full control over the flow conditions and turns data overflow into valuable decision-making information and expert guidance. The software comes with a series of specialised modules in the areas of flow assurance, sand & erosion, corrosion, simulation and production control, and virtual metering.

Whether it is from the platform or onshore, Roxar Fieldwatch enables operators to access everything from individual data series from an instrument to providing complex expert guidance for choke settings. Roxar Fieldwatch can also quickly visualise data and identify trends and areas requiring further analysis.



Roxar Fieldwatch - A System Overview

Roxar Fieldwatch is a comprehensive Windows-based user interface and data management software for ensuring safe and reliable operations. The software is modular and is built up from three main components:

Roxar Field Server resides on the platform or facility and gathers, stores and distributes data from our locally installed meters, sensors or gauges. The Roxar Field Server is built using the latest Microsoft .NET Framework technology. Data is stored in a proprietary data format, specifically designed for handling large data volumes with ultra high performance.

Roxar Field Interface is the application that enables the Roxar Field Server to communicate with each of our different types of field instrumentation. Every one of our field instruments has its own unique Roxar Field Interface.

Roxar Field Explorer is the specially designed operator interface application that resides on workstations on the platform or facility and, if desired, at the head office or other remote locations. Each Roxar Field Explorer application is designed for product-specific functionality that provides all the required graphics, algorithms and data handling functions for a specific Roxar product.

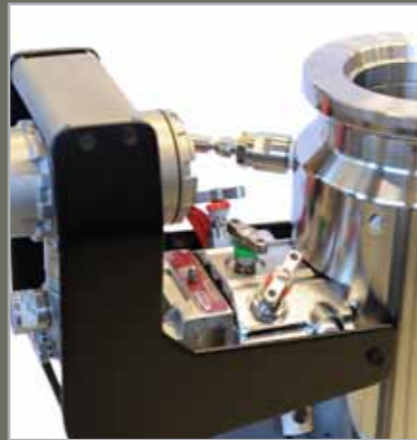
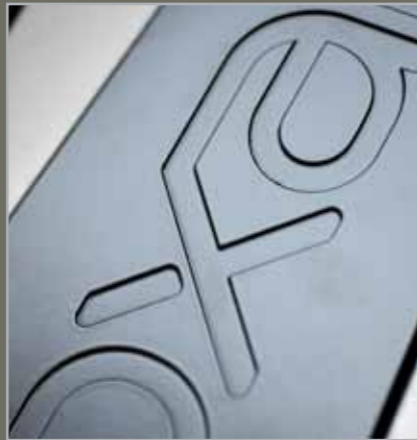


R&D

Roxar has a business model built around innovation. That is why R&D is so important to us and sets us apart from the competition.

Today, Roxar has more than 50 scientists dedicated to developing instrumentation solutions of the future, engineering teams focusing relentlessly on improving the design, flexibility and costs of our existing solutions, and global customers actively participating in our R&D activities.

And when we see a market demand, no company can rival us in the speed in which we transfer R&D into fully operational commercial products. 65% of 2007 sales of Roxar instrumentation came from products not commercially available before 2002 - highly impressive for an industry well-known for being conservative.



We bring the products of tomorrow to the market today.

World Class Manufacturing



Roxar has its own world-class manufacturing and testing facilities in Norway with capacity and capabilities increasing to meet market demand. We work with leading suppliers across the world, securing top quality components for all our equipment.

As the industry's largest supplier of multiphase and wet gas metering and with subsea equipment demanding the highest standards in reliability, we have extensive in-house testing facilities including hyperbaric tanks, flow loops, vibration and calibration facilities.

Roxar is also an experienced manufacturer of downhole equipment and instrumentation. Since 1997, we have delivered over 800 gauge systems for installation in the North Sea and international markets. We carry out in-house Electron Beam Welding and Environmental Stress Screening, and design and assemble according to IPC and API standards.

We are certified to the ISO 9001:2004, ATEX, PED, GOST, KOSH, UL and CSA and always works to the very highest standards with respect to health, safety and the environment, project execution and quality plans. Our product quality is also measured and documented throughout the entire manufacturing process.

Roxar Global Service

- Enhancing the Customer Experience

Roxar Global Service is a worldwide service organisation. Roxar employs more than 100 service staff across a network of offices in Europe, the Americas, Africa, CIS, Asia, Australia and the Middle East – all with a wide array of industry experience.

Safety is always a key focus as proven by our outstanding track record over the years.

We maintain an Emergency Preparedness Programme in order to always be available to support regular as well as non-regular calls from our field personnel.

From installation through to a field's decommissioning, we believe in helping you get maximum value from the technology solutions we deliver and enhancing your customer experience.

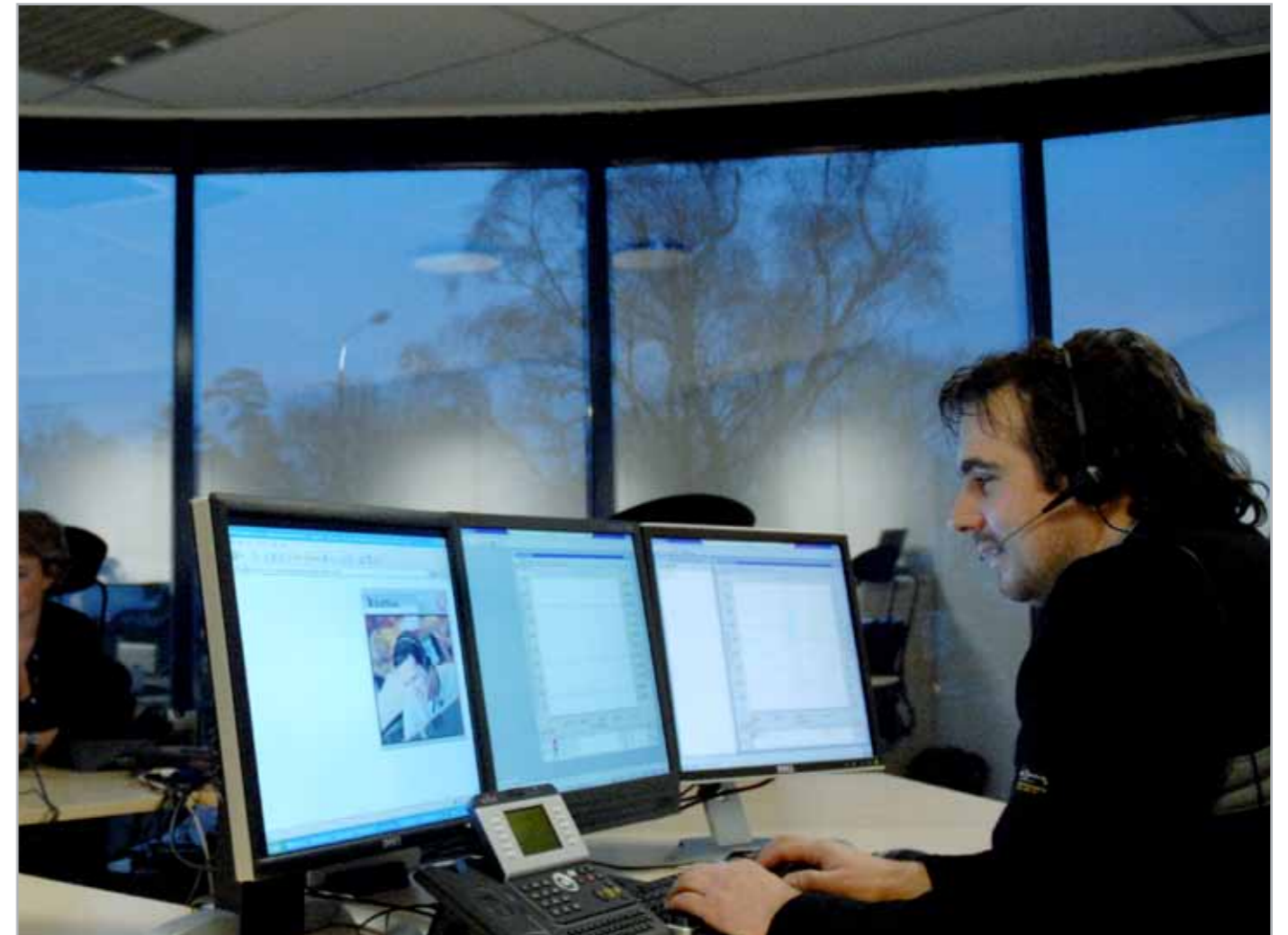


Protects our Customers Investments

Today's global E&P industry is all about maximising assets and generating maximum value from partnerships.

Products are not just about hardware – they are about the people, information, workflow, training and support which create a complete service-focused solution. Roxar understands this and the Global Service division is our commitment to support and maintain all our products worldwide.

Through our Global Service division, we are strategically partnering with our customers to keep our solutions operating at peak performance. Global on-site support, remote technical support, data analysis and consultancy, training, robust Technical Service Agreements – these are just a few of the services we can provide. The result is improved productivity and significant investment returns on Roxar solutions.



From complex and remote reservoirs to the need to manage costs, increase efficiencies and enhance flow production, operators today are facing a host of challenges.

Through technology excellence and innovation, Roxar is meeting these challenges head-on.

The result is an effective closed-loop process where our instrumentation, alongside Roxar Fieldwatch, create a common desktop for visualisation, monitoring, and analysis and a complete picture of the reservoir.

In this way, the operator can monitor production continuously, observe and control fields from remote locations, and make immediate decisions to maintain unrestricted flow and increase productivity.

For further information and to strengthen your reservoir management solutions...

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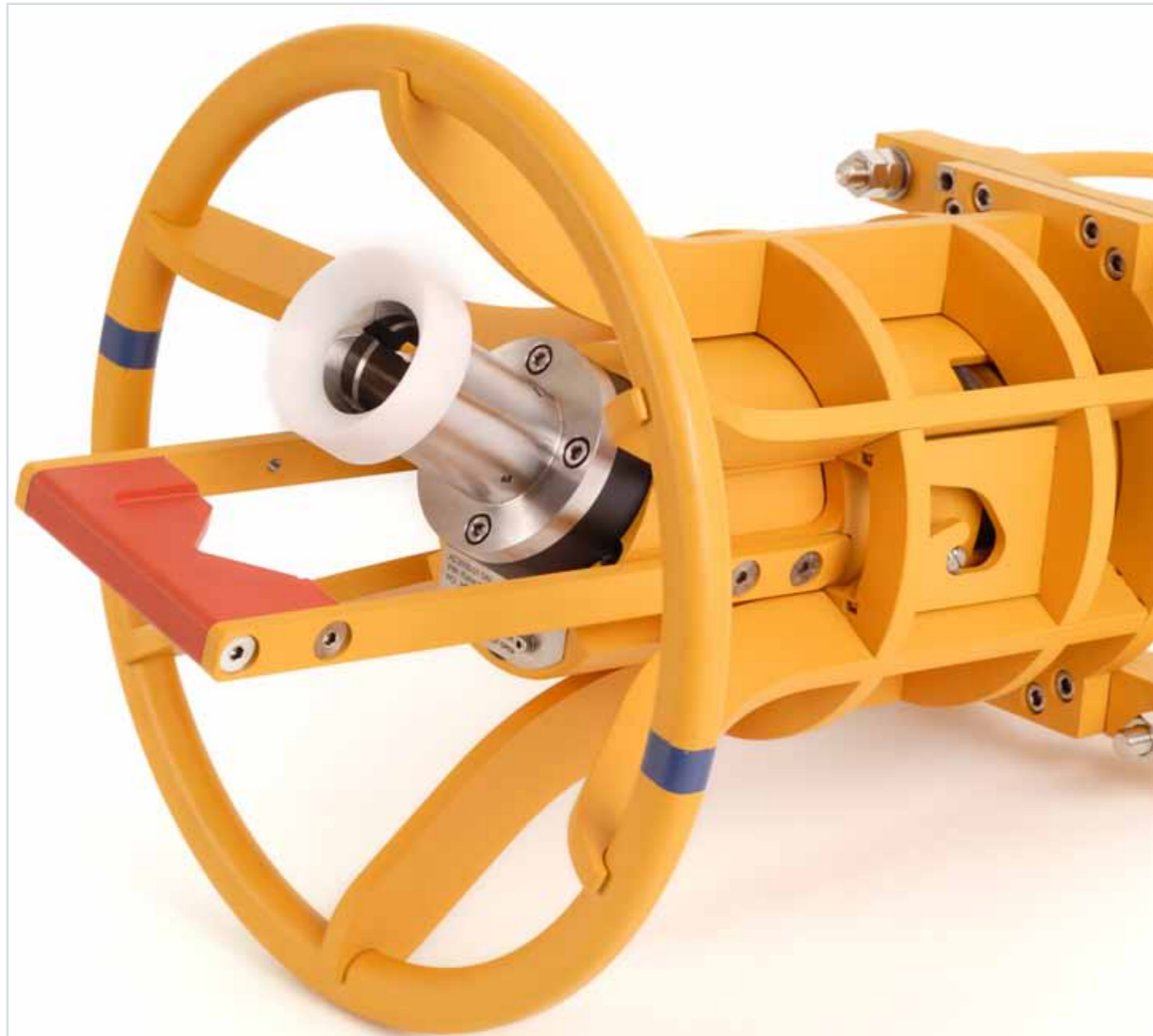
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Product Range



In May 2009 Roxar became part of Emerson Process Management, adding subsea reservoir management and production optimisation for global upstream exploration and production (E&P) customers.

The combination of Emerson and Roxar creates the world's first integrated automation solutions company with products spanning from subsea oil and gas reservoirs, to platform and floating production, to transmission, and ultimately through refining and production of goods.



TOPSIDE

- Roxar Multiphase meters
- Roxar Pig detectors
- Roxar Sand monitors
- Roxar Watercut meters
- Roxar Wetgas meters
- Roxar Oil-in-Water monitors
- Roxar Erosion monitors
- Roxar Corrosion monitors
- Roxar Field Signature Method (FSM)



SUBSEA

- Roxar subsea Multiphase meters
- Roxar subsea Wetgas meters
- Roxar subsea Singlephase meters
- Roxar subsea Acoustic Sand monitors / Pig detectors
- Roxar subsea Pressure & Temperature sensors
- Roxar subsea Sand Erosion sensors
- Roxar subsea Corrosion monitors
- Roxar subsea Singlephase sensors
- Roxar subsea Field Signature Method (FSM)
- Roxar subsea Chemical Injection valves
- Roxar subsea ROV retrieval system



DOWNHOLE

- Roxar downhole HM gauge system
- Roxar downhole HS gauge system
- Roxar downhole Polymer cable protector
- Roxar downhole Stainless Steel clamps
- Roxar Wellhead outlet
- Roxar Surface Acquisition Unit (SAU)
- Roxar IWIS canister
- Roxar downhole Network Controller card
- Roxar downhole cable
- Roxar downhole Instrument carrier
- Roxar downhole sleeve



