SURFACE PRODUCTION SYSTEMS & SERVICES
Proserv is the fresh alternative in global energy services. We are a technology-driven company providing products, services and bespoke solutions to clients across the drilling, production and decommissioning market sectors.

Combining technical ingenuity with design, engineering, manufacturing and field services expertise, we support clients throughout the lifecycle of their assets with a focus on maximising operational performance and efficiency.

In our ongoing pursuit for excellence, we are not afraid to challenge the conventional. Ingenious Simplicity is at our core and we are committed to helping clients produce more for less. Partnering with progressive, like-minded companies, we cut out unnecessary complexity to provide appropriate, yet ingenious solutions delivered simply.

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Ingenious surface production solutions

Proserv specialises in a broad range of services and solutions for optimising production across the entire oilfield lifecycle. For over 45 years, our teams around the world have been at the forefront of new technology advancements, delivering ingeniously simple and fit for purpose technology solutions that increase the performance and reliability of our clients’ assets.

OUR CAPABILITIES

• FEED studies
• Engineering and manufacturing
• Fabrication and assembly
• Installation and commissioning
• Operations and manpower support
• Inspection, repair, refurbishment and upgrade
• Spares and inventory management
• On-site services and training

Through organic growth and the acquisition of like-minded companies with shared strengths and complementary technologies, Proserv owns the best known brands in the industry - Brisco, eProduction Solutions, Autocon and CAC, which has strengthened our overall capabilities and expertise.
Smart engineering you can count on.

We offer a broad range of highly efficient and reliable services to support surface field development. These services deliver ingeniously simple technology solutions that produce more for less. Our vision is for safer and more efficient production equipment, which has led to many valuable innovations through the years. From pre-engineered products, to fully customised designs, we have a solution for every application.

Our services range from engineering and manufacturing through to assembly, testing and commissioning, providing clients with the complete solution for their asset new build requirements.

- Production control systems
- Automation systems
- Production sampling
Production control systems

Proserv designs, manufactures and installs bespoke systems for control, monitoring and safety of oil and gas production. Our efficient and smart production control systems help monitor well performance and reduce operational costs.

As well as new build systems, Proserv provides installation and aftermarket support in the form of equipment modifications, maintenance and refurbishment services to help clients get the maximum value from current assets in the field.

- Wellhead control panels
- Hydraulic power units
- Chemical injection
- Emergency shut down systems
- Wireline panels
- Corrosion inhibitor systems

Automation systems

Proserv is an integrated service provider of complete automation systems for producing oil and gas fields and pipelines. Our solutions include RTUs, PLCs, controllers and downhole gauges at the field site; radio, cellular and satellite communication systems; and SCADA, artificial lift analysis, operations management and well-file software.

Our telemetry and SCADA systems provide clients with the capability to monitor and control field operations across a widely dispersed infrastructure helping to improve the efficiency of remote operations and assets.

Proserv offers integrated control and monitoring solutions for CALM buoys. These provide the mooring point and oil loading mechanism for crude oil super tankers. The systems we supply allow for remote control and monitoring of the buoy instrumentation and navigation aids.

Production sampling

Proserv specialises in the provision of sampling equipment, systems and bespoke solutions throughout the life of the reservoir from evaluation and appraisal through to decommissioning. Our expertise is founded on our broad technical knowledge and extensive in-house engineering capability, combined with a track record spanning 40 years.

We specialise in solutions for:
- Reservoir evaluation and appraisal
- Sample handling equipment and transportation
- Downhole reservoir sampling
- Wellhead sampling
- Surface sampling
Getting the most out of your assets.

Unlocking the potential of your assets involves more than electronics and software; it requires a systematic approach that combines proven equipment, collaborative field-management solutions and experienced personnel.

We provide a wide range of services to help optimise the lifespan and performance of our clients’ assets to maximise production over the life of a field, at minimal cost. Our global optimisation services team understands the industry and challenges and they help to deliver measurable performance improvements to our clients’ assets worldwide.

• Installation and commissioning
• Instrumentation and calibration
• Flushing services
• Chemical injection
• Shut down support
• Well monitoring performance and monitoring
• Corrosion inhibitors
Installation and commissioning

We have extensive experience of production equipment installation and commissioning projects across the world. Proserv provides control system design, manufacture, installation and commissioning for hydraulic and pneumatic control. This ranges from conceptual design to fully commissioned installations for a broad range of applications and industries.

Our manufacturing facilities work alongside our design, software and communication systems, and installation departments to provide integrated solutions for power distribution, process control and automation requirements.

Proserv employs experienced crews that have worked on production facilities, drilling rigs, refineries and pipelines for over 40 years. Crews are supported by survey specialists, estimators and project managers for worldwide assistance and project completion.

Instrumentation and calibration

We provide a wide range of services to help optimise the lifespan and performance of our clients’ assets to maximise production over the life of a field, at minimal cost.

Proserv instrumentation and electrical packages can be delivered from conceptualisation and design through to installation, commissioning and ongoing maintenance, or a single standalone service.

Proserv calibration services can be performed for electrical, metrology, temperature and pressure related instrumentation equipment onshore and offshore. Furthermore, we can provide on-site servicing programmes for all our oilfield equipment including re-certification, testing, inspection, repair and calibration services.

Flushing services

Proserv specialises in new build and aftermarket services of flushing equipment. We also offer a wide range of flushing units and flushing rigs with diesel engine drive and electrical drive options for sale and hire for offshore and onshore use.

Chemical injection

Proserv specialises in the application, design and manufacture of transportable, permanent and skid-mounted chemical injection systems. These systems can be of standard design or built to our customers’ requirements to deliver the full range of production chemicals.

Our chemical injection pump units range from a single pump application to multiple pneumatic injection pumps, with discharge flow rates of zero to 2500 litres per hour and pressures from zero to 13,000 psi.

The pumps are constructed from stainless steel, which can be trimmed for various applications. We also design containerised flow improver systems for extreme environmental conditions.

These units are fully insulated and contain chemical storage tanks, allowing the units to function for longer periods of time without the need for logistical support.

Proserv’s highly skilled service engineers specialise in the installation and configuration of chemical injection systems to our clients’ exact specifications and application of use.

Shut down support

Proserv can deliver breakdown, maintenance and shut down service packages to support our customers’ operational requirements on a 24/7 basis.

We specialise in the provision of skilled resources for our customers’ personnel to keep process and controls equipment in excellent working order and ensure facilities remain in a satisfactory operating condition.

Corrosion inhibitors

Corrosion is a natural occurrence, however if not controlled, it can alter equipment to become non-functional and ultimately harm entire operations. Whether it’s onshore or offshore, topside or subsea, Proserv provides systems that deliver a prescribed amount of chemicals into the process, through single or multiple injection points, to a high accuracy.

Proserv’s comprehensive approach to corrosion monitoring lets clients build custom fit solutions that will enhance field safety and increase production levels.
During these difficult times improving operational efficiency is key in adapting to changing conditions. Clients expect to have access to the same services wherever they are: on land, on board a supply vessel, rig or even an oil platform. The Proserv Smart Box is a great example of our engineering teams doing what they do best, which is actively seeking new ways that we can improve the performance and reliability of our clients’ operations.

Prior to the introduction of this solution there was no other efficient and cost-effective automated alternative that would allow real time fault identification. Shut downs can now be detected instantly and safety incidents mitigated. As fewer vigorous visual inspections are required this reduces operating costs further still.

Well monitoring performance and monitoring

The Proserv Smart Box is a real time monitoring solution to evaluate onshore and offshore wells in remote sites. Unplanned shut downs can cost operators up to one percent of total annual production. With the Smart Box, shut downs are detected instantly avoiding prolonged production losses and lowering operating costs.

The Smart Box is an intelligent device with an inbuilt GSM modem that collects information from production equipment at the well site and then transmits alerts to personnel via GSM straight to a mobile device. This ingeniously simple technology solution can be embedded within any of our systems and customised to a client’s exact specification for increased operational efficiency.

- Increased annual production through instant detection
- Less visual inspection
- Real time shut down alerts
- Improved efficiency through faster response time
- Less maintenance, spares and repairs required
AFTERMARKET SERVICES

Service is an integral part of our business. Preventative condition monitoring, expert maintenance, rapid response repair work and replacement part deliveries are key factors in achieving maximum asset reliability and cost-effective performance year after year.

Our service is backed by a global network of manufacturing, engineering and customer service centres that can meet the tightest schedules while achieving the most competitive pricing through our global supply chain network.

Our aftermarket services also include client training and we can provide custom training programmes that deliver the right knowledge and skills to increase safety, efficiency and productivity in the workplace.

- Asset reliability and integrity
- Equipment upgrades and lifecycle services
- Platform topside/structure upgrades

8000 control panels installed globally
Ownership of four legacy brands, including Brisco, CAC, Production Solutions, and Autocim
50 custom client training programmes
350 aftermarket support projects completed globally
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50 custom client training programmes
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Asset reliability and integrity services

More equipment and systems are rapidly reaching their end of life. Combined with industry wide cuts in capital expenditure, this is resulting in more failures leading to operational inefficiencies.

Proserv’s risk based asset reliability programme applies to our clients’ pre-installed equipment, new build systems and third party assets. By working together, Proserv can provide tailored services for preventative maintenance, helping to minimise operational failure and system downtime.

Equipment upgrades and lifecycle services

At Proserv, we work closely with our clients to offer services that can increase the output, performance and life of oilfield assets and infrastructure while minimising costs.

We specialise in the provision of skilled resources and training for our customers’ personnel to keep process and controls equipment in excellent working order and ensure facilities remain in a satisfactory operating condition.

We preserve and restore processes, automation and control equipment by repairing, overhauling or replacing worn components (preferably before they fail and result in costly downtime) and return those assets to a specified state to safely perform their requisite operational requirements.

Our services include inspection, testing, servicing, and classification as to serviceability, repair, rebuilding and reclamation.

Platform topside/structure upgrades

A growing proportion of platforms and topside infrastructure is reaching the end of their intended design life. Proserv’s friction welding technology has become an essential part of many asset owners’ integrity management programmes.

Proserv’s friction welding technology provides the ability to retrofit galvanic anodes to platforms, FPSOs, subsea infrastructure and pipelines. This innovative technical solution offers asset owners a new alternative to cathodic protection (ICCP) systems and clamps.

The same solution is also used to attach acoustic corrosion monitors that enable the asset’s condition to be known and provide data on the performance of the retrofitted anode system.

Friction welding applications:

- Anode attachment in oil storage tanks
- Brownfield topside structural upgrades and repairs
- Greenfield modifications – new topside modules on FPSO platforms
- Attachment of nipples - top taping and salvage
- Pin hole leak repairs – friction plug welding
Core to the Proserv offering is our ability to manufacture, deliver and support solutions locally, by local and highly experienced technicians. For us, local content is not just about meeting legislative requirements or ticking a box. We do it because we have a responsibility. It creates a positive social and economic impact and makes good business sense. To ensure this is sustained, we recognise the need to support, train and build local expertise, which we do through our skills development programmes.

Operational Excellence

Operational excellence is an essential component of Proserv’s continuous improvement efforts, helping to deliver world-class performance and drive business results. For Proserv, operational excellence is not something separate from our business; it is how we run our business to achieve our vision of success. Proserv’s operational excellence is about ensuring that every product, service and solution is delivered on time and right first time in the safest and most efficient way. This is our personal commitment and it is applied in the delivery of all our client projects.
Supply Chain
At Proserv, we have developed strategic relationships with many suppliers to ensure we provide exceptional supply chain integration and service. We believe the capability and reliability of our supply chain integration is as important as the in-house facilities. We monitor the service and business levels of key suppliers to ensure that excellent service is delivered to our customers.

Project Management
Our teams leverage their years of expertise to manage the risks, costs and safety of our clients’ projects. No typical project is the same. We provide a tailored and integrated set of project management processes and systems for consistent and rigorous project delivery. We appoint an experienced person to be the single point of contact for each client project. This individual is then responsible for ensuring the project is completed on time, on budget and to the agreed quality.
Background
Based on our expertise in intelligent wellhead control panel systems, and our long-standing relationships with Baker Hughes and Aker Solutions, Proserv was awarded a contract for the supply of two remotely operated intelligent well control panels for new platforms, Ekofisk 2/4 Zulu and Eldfisk 2/7, both operated by ConocoPhillips and situated in Scandinavian waters in the North Sea.

Project Description
Specialist engineering and project teams were put in place to ensure the effective management and delivery of this project.

While the contract was awarded to the team in Stavanger, the project was executed from Aberdeen, with the panels manufactured and assembled in our centre of excellence in Dubai, and then delivered to Stavanger for final assembly and testing.

Proserv’s centre of excellence was established to supply high quality products to our customers on time and at the best cost. With a dedicated team of manufacturing, logistics, planning and supply chain professionals in house, this function was essential in the successful execution and timely delivery of this project to the client.

Scope
Proserv was responsible for the design and engineering of hydraulically controlled intelligent well control panels for interface with Baker Hughes’ intelligent well completion system and SCADA computer hardware. The panels had the capability to control 20 wells, with each well able to control a ten zoned completion with inflow control valve and choking capabilities, essential for optimising production levels.

Once the sub-assembly of the panels was completed, they were shipped to Stavanger for factory acceptance testing. This process was carried out at Proserv’s facility, with Baker Hughes in attendance, to ensure equipment compatibility and compliance with all contractual specifications.

Conclusion
This project required complex engineering to meet the client’s exact design specification and within a fixed time frame of 30 weeks from concept to delivery. Proserv successfully delivered the project on time and within budget.

Benefits
• With the remote monitoring and control capabilities, quicker changes can be made to the well settings without mobilising an operations crew
• Through the cross sharing of knowledge and expertise across the company, clients benefit from high quality products and services, with improved lead times, at the best price
Production Optimisation Case Study

Production Control Systems

Client: Shell
Location: Nigerian Coast, West Africa
Equipment: Production control system

Background
Proserv was approached by Shell to develop a solution to allow unmanned operation of the Bonny crude loading platform (CLP) and provide instrument and control of a diesel driven generator.

Located in water depths of 27 metres, the CLP supports Shell’s 48 inch export pipeline and 36 inch valves manifold 29 kilometres south-west of the Bonny terminal in offshore Nigeria.

Project Description
Proserv converted the CLP to operate as an unmanned installation, designing and manufacturing the controls, telecommunications, navigational aids and beacons, CCTV and intruder detection.

Scope
The remote control and monitoring of electrical equipment is critical to the operation of an unmanned platform.

All electrical power generation and distribution equipment was re-designed and supplied by Proserv through the provision of 120 solar panels and interruptible power supply systems.

The team also implemented a process automation system. This provided comprehensive plant-wide monitoring, control and shut down functionality, centralised fire and smoke monitoring and a workstation based operator interface, ensuring a timely response to unplanned process problems.

Existing CLP telecommunications equipment was fully integrated with the solar powered system provided by Proserv, allowing 24 hour control from the Bonny terminal.

Conclusion
The CLP was originally manned by 12 personnel at all times. The client required a solution to de-man the CLP without compromising on safety. Proserv provided all aspects of the de-manning of the project, which allowed the client to safely monitor and control the CLP remotely while reducing operating costs.

Benefits
- Proserv provided all aspects of the de-manning of the project so Shell could safely monitor and control the CLP remotely while reducing costs
- Proserv is an integrated service provider of complete automation systems for producing oil and gas fields and pipelines
- Our superior technology solution empowers users to make better informed decisions from their desktop for more effective operations

The client required a solution to de-man the crude loading platform (CLP) without compromising on safety. Proserv provided all aspects of the de-manning of the project, which allowed the client to safely monitor and control the CLP remotely while reducing operating costs.
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