



# Commercial Diving

Products and Services

[jfdglobal.com](http://jfdglobal.com)



# Introduction

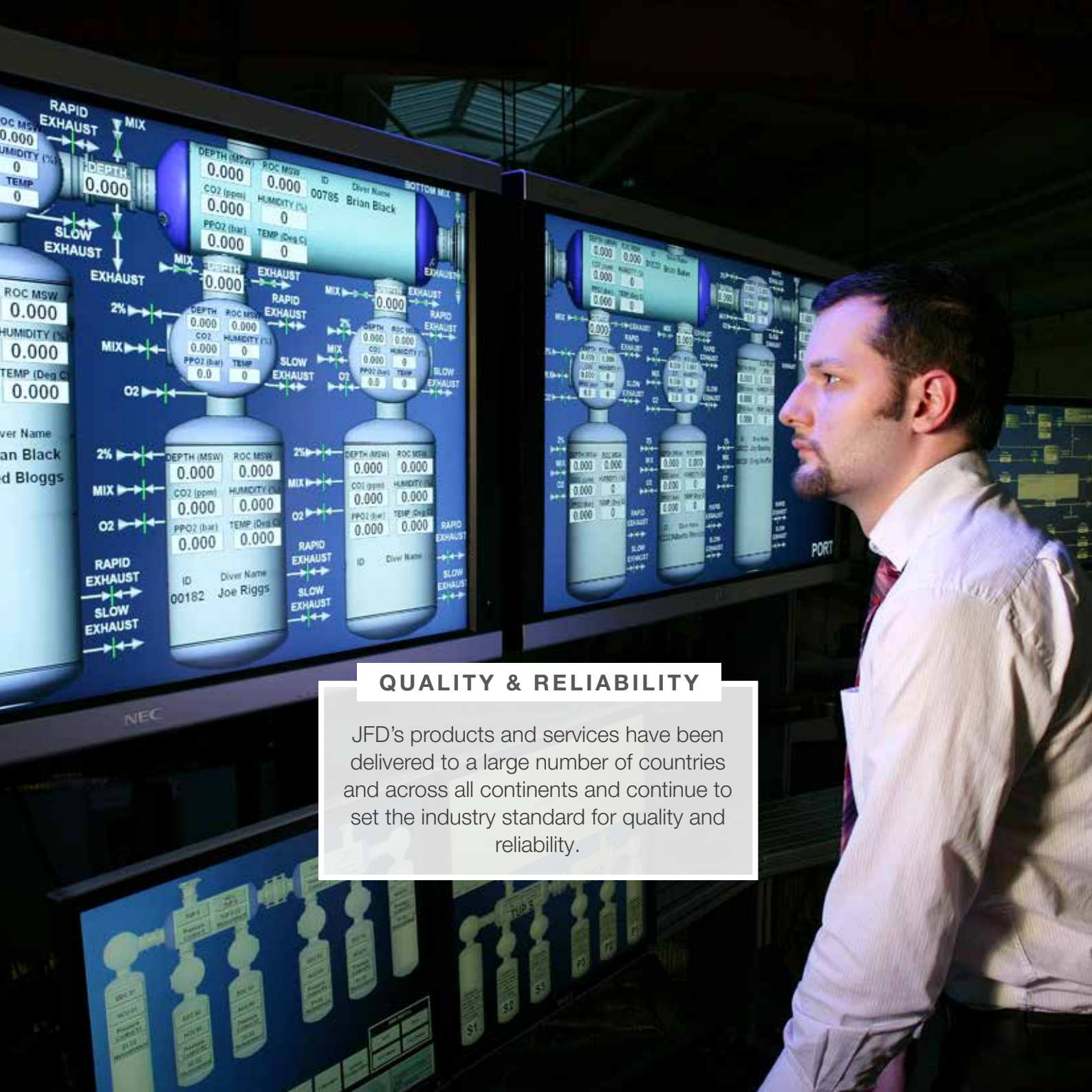
Our vision is to be the unrivalled, first choice partner to commercial, international underwater operators and global defence forces in our chosen field and we will continue to support our clients' core operations by offering market leading technology solutions and world class support.

JFD is one of the world's leading subsea operations and manufacturing companies, delivering world-class subsea engineering projects, products and services to commercial and naval customers worldwide. The company is the world's leading provider of submarine rescue capability and an established provider of submarine escape training. The company is at the forefront of Hyperbaric Rescue and is the leading supplier of commercial diving equipment and saturation diving systems to the commercial industry.

Our commercial diving expertise and engineering facilities permit an ever more diverse range of specialist solutions to meet specific client requirements.

JFD was created in 2014 through the merger of Divex and James Fisher Defence. In 2015 JFD acquired the National Hyperbaric Centre to further boost the services offered to its customers. In 2016 LEXMAR was acquired to enhance the capability and offering within JFD's diving capability and suite of saturation diving systems. JFD acquired diving and recompression specialist Cowan Manufacturing in February 2018.

JFD is a part of James Fisher and Sons plc.



## QUALITY & RELIABILITY

JFD's products and services have been delivered to a large number of countries and across all continents and continue to set the industry standard for quality and reliability.





# Commitment

We operate on a global basis and have a simple goal which applies wherever we operate – to avoid any harm to either people or the environment.

## Health & Safety

Health and safety is an important factor in all our activities. We carry out all our work in a manner that shows consideration for our own employees, our clients, contractors and other parties. Our goal for health and safety is for no accidents, incidents or harm to come to people.

The management and control of risk, prevention of harm and compliance with legal and governmental requirements are essential to the success of our business.

Our Health and Safety System complies with the requirements of OHSAS 18001.

## Environment

We strive to minimise any impact we may have on the environment. We have in place an environmental policy to help reduce and eliminate potential harm to the environment from our work or employees. Our Environmental Management System complies with the requirements of ISO 14001.

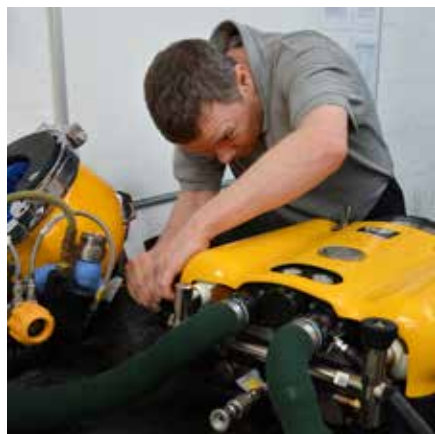
## Continual Innovation

Through continual innovation, we are fully committed to optimising the quality and safety of our products – and indeed the safety of our employees and clients. A HSEQ (Health, Safety, Environment and Quality) Management System operates throughout our business – and this has benefited the safety and efficiency of all who dedicate their lives to the underwater world. Our investment in an extensive test and development programme underpins and strengthens our reputation for innovation, the commitment of our people, and the quality of our support services.

## Quality Assurance

Our Quality Management System is certified to ISO 9001.

Many of our products also meet the requirements of various independent directives, including Personal Protective Equipment [PPE], Medical Directive [MD] and Pressure Equipment Directive [PED]. Certain JFD designs are also approved against particular codes or standards such as BS 5500 and ASME.





# Products

JFD manufactures and supplies a wide range of diving and subsea products for the commercial and hyperbaric sectors.

## Commercial Divers' Equipment

JFD's commercial diving expertise and engineering facilities enable the production of a diverse range of commercial diving products which support safer and more economic global diving operations even in the most hostile of environments.

- > Ancillary Dive Gear
- > Commercial Equipment & Tools
- > Commercial Helmets, Masks & SCUBA
- > Commercial Rebreathers
- > Commercial Surface Supply
- > Diver Harnesses
- > Dirty Harry
- > Divers' Suits & Undersuits

## Compasses, Gauges & Watches

We provide a range of Diver worn instrumentation to provide the diver with depth, navigational and gas content information.

- > Compasses
- > Contents Gauges
- > Divers' Wrist Watches

## Diving Instrumentation

Incorporating well-known names such as Airedale Instruments, and Foundrometers Gauges, with our own manufactured range, JFD offers a wide range of quality depth, pressure and hyperbaric gauges for diving and medical use.

- > Charging Assemblies
- > Charging Hoses
- > Gauges







# Products

We are the largest manufacturer and most diverse supplier of professional diving equipment worldwide. We work closely with our clients ensuring that all aspects of any design and build are integrated successfully.

## Electrical Diving Equipment

Our high quality electrical diving equipment caters for professional divers, including police search and rescue teams, saturation divers and inshore commercial divers. The range supports safer and more economic diving operations.

- > Diver Communications
- > Diver Lighting
- > Diver Video Systems
- > Gas Analysers

## Gas & Fluid Systems

JFD are world leaders in gas recovery operations and environmental conditioning equipment for the saturation diving market. Our comprehensive range, incorporating both JFD brand products with well-known names such as Analox, Kinergetics and Gasmizer, provide gas monitoring and gas reprocessing solutions ensuring a safe and comfortable environment for the diver.

- > Analysers
- > Breathing Air Compressors
- > Environmental Control
- > Gas Reclaim
- > Surface Panels
- > Diver Heating

## Medical & Safety Equipment

JFD supply a full range of medical equipment suitable for a range of diving operations. Our experienced team are able to provide detailed advice on the most suitable equipment.

- > Bell Survival Kit
- > BIBS Manifold Block
- > Confined Space Rescue Stretcher
- > Divex Back Pressure Regulator
- > Divex Interlock
- > DMAC 015 Kits
- > DMAS HyperSAT
- > Hy-Fex Hyperbaric Fire Extinguisher
- > Hyperlite Hyperbaric Stretcher
- > Oxygen Kits







# Saturation Diving Systems

JFD is a world leader in the design, manufacture, installation and maintenance of complete saturation diving systems. The company's track record shows more than 100 systems built spanning the last 35 years.

Through the development of an international network, JFD is able to implement a global approach to its overseas projects by combining expertise from its UK headquarters and worldwide facilities. Engineering experience, assembly efficiency and manufacturing costs can all be strategically aligned providing customers with products and services that are focused on both value and performance.

The systems can be configured to suit a range of vessel designs, layouts and requirements. The systems can be identified in two distinct categories - integrated and modular.

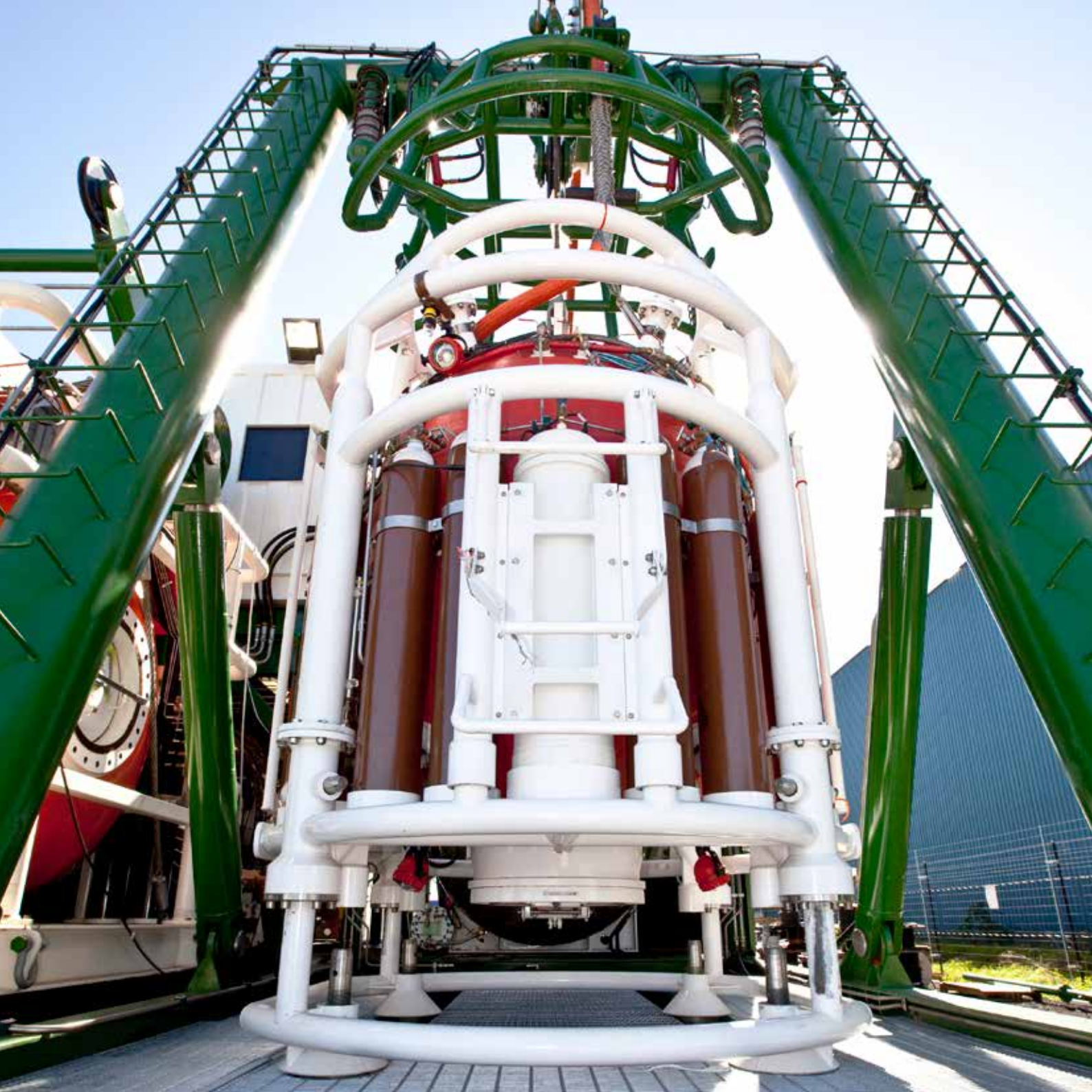
## **Integrated Saturation Diving Systems**

JFD offer a flexible range of designs of 12, 18 and 24-man saturation systems for integration into new diving support vessels.

## **Modular Saturation Diving Systems**

JFD's modular saturation diving systems are designed to be rapidly deployable and flexible to allow rapid configuration on a variety of vessels.









# Saturation Diving Systems

JFD has worked on various projects which have significantly advanced diving capability, allowing operators to work in sea states which would previously have seen the suspension of diving.

## Seven Atlantic - Subsea7

The Seven Atlantic was one of the first DSVs in the world to be fitted with JFD's computer based control system which provides automated life support and hyperbaric environment control. The 24-man twin bell system is rated to 350msw and is in demand around the world to undertake advanced diving operations. The system is built to Lloyds class, is NORSOK compliant and conforms to IMCA requirements.

## Deep Explorer - Technip

Arguably the most technologically advanced and fully integrated dive system in the world. The Deep Explorer has been purpose-designed to withstand the most demanding sea states and weather conditions capable of supporting diving operations year round, complying with NORSOK standards and classified by Lloyd's Register. The vessel comfortably accommodates 24 divers living in saturation within a dive system rated to 350msw supported by two new generation 24-man SPHLs.

## 500m System - Shanghai Salvage

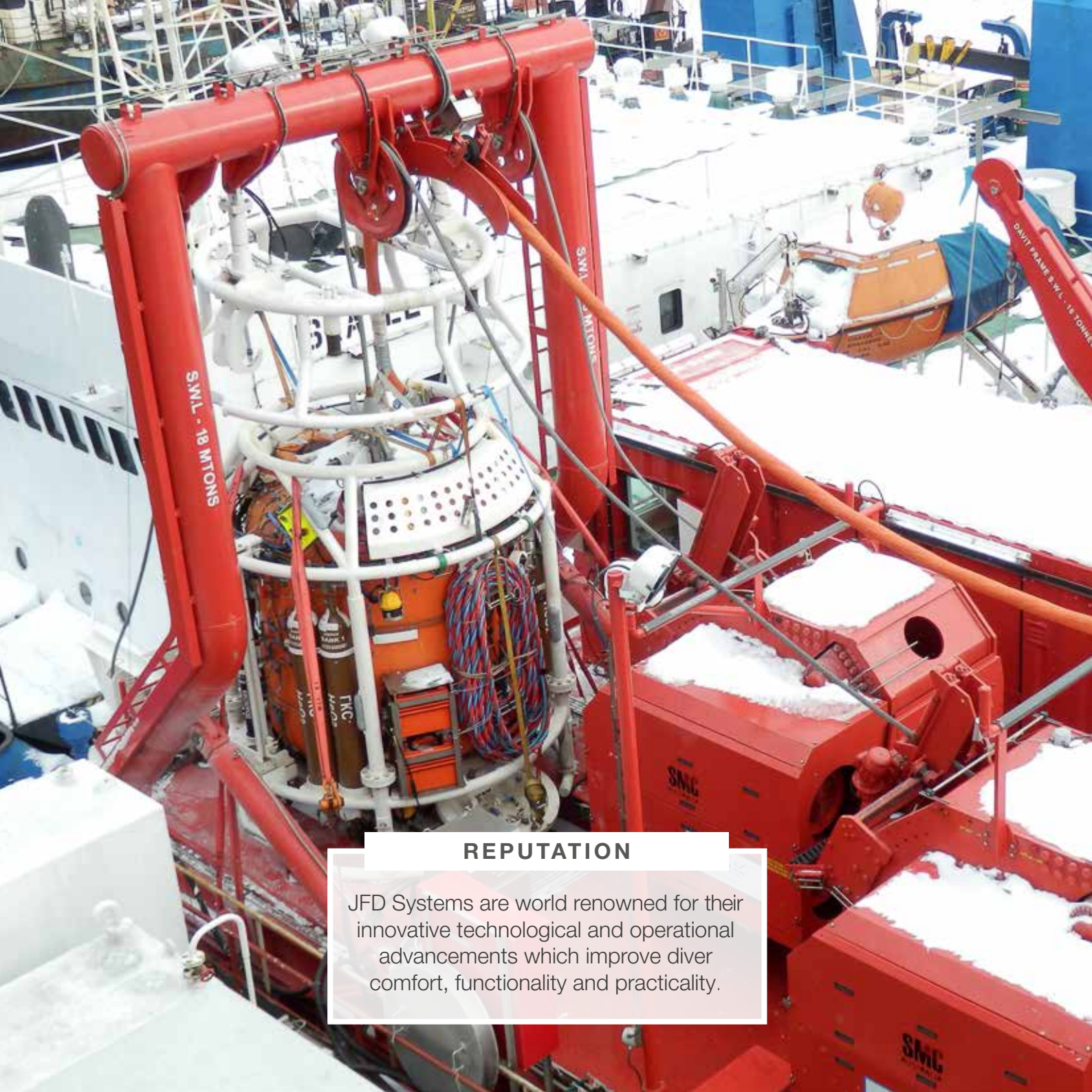
Currently in build, is a 500m 24-man modular diving system which will become one of the deepest systems in the world capable of operating significantly beyond the depth rating of the majority of standard diving systems.

## Arctic System

JFD is the first company in the world that met the ARCTIC challenge building a 9-man system designed to operate in temperatures between -22°C to +55°C.

## SCV Khankendi

Design and manufacture of an integrated 300msw, 18-man twin bell, twin hyperbaric lifeboat Saturation Dive System. Designed to DNV Class for installation on board the new build vessel measuring 155m long and a beam of 32m in support of construction activities in the Caspian Sea. The system includes JFD gas recovery and life support systems and marks a significant leap forward in diving technology terms in the region.



## REPUTATION

JFD Systems are world renowned for their innovative technological and operational advancements which improve diver comfort, functionality and practicality.



# Saturation Diving Systems

## Control Rooms

Using the latest technologies, control rooms can be fully automated or use a conventional direct control approach.

## Gas Management

JFD's industry leading gas reclaim systems deliver the highest standards of safety during diving operations, while ensuring optimum helium gas recovery to reduce operating costs.

## Hyperbaric Rescue Chambers & Self Propelled Hyperbaric Lifeboats

HRCs and SPHLs can be built to customer specification. Designed to provide the highest level of safety and performance during an emergency evacuation, JFD SPHLs can be supplied compliant with NORSOK, ABS, DNV, IMCA and Lloyds Register based on customer specification. JFD SPHLs are engineered to 12, 18 and 24-man configurations rated up to 600m.

## Launch & Recovery Systems

JFD can provide Launch & Recovery Systems in a number of configurations, balancing cost, simplicity of maintenance and operation and mobilisation time.

## Life Support

Environmental control equipment provides full temperature and humidity management of the saturation diving chambers to ensure the comfort and safety of divers.

## Living & Decompression Chambers

Designed to optimise space and provide a safe and comfortable environment for the divers.

## Submersible Diving Chambers

JFD submersible diving chambers (SDC) are designed to deploy 3 divers and are able to withstand both internal and external pressures up to 300 MSW at design temperatures between -18°C deg to +66°C.







## HRF CAPABILITY

Our fixed hyperbaric reception facility has unrivalled capability in terms of performance, capacity, medical support and operational experience.





# Hyperbaric Reception Facilities

JFD has worked in collaboration with North Sea diving contractors for over 30 years helping to ensure the safety of saturation divers in the event of an emergency.

Having one of the most capable facilities in the UK means we can transfer these skills and expertise to help support hyperbaric reception globally.

JFD has developed a global hyperbaric rescue service which aims to work alongside contractors in order to develop an effective, capable and cost efficient solution for their global operational requirements.

## Fixed Hyperbaric Reception Facility

JFD maintains the only enclosed and fixed hyperbaric reception facility in the UK that is able to support the reception of new-generation 24-man SPHLs. The facility benefits from being connected to a dedicated DMAC 028 compliant medical chamber, supported by leading hyperbaric specialists, allowing JFD to offer the most comprehensive HRF and support package in the world.

## Portable HRF

JFD owns and maintains an 18-man Portable HRF which can support diving operations in remote areas and globally.

We plan to further strengthen our presence and capability in key locations across the world over the next couple of years. We believe a similar level of hyperbaric rescue capability to what we provide in the UK should be available for divers globally and are committed to developing our assets in order to achieve this.





# Services

JFD provides a range of subsea and diving related services for maritime, commercial and offshore customers.

JFD's expert subsea engineering, manufacturing and technical teams enable the company to support its clients' operational, research, development and training requirements.

Through Service+, JFD brings together these skills to deliver a range of responsive and cost effective services to support and enhance existing equipment and systems. This allows companies to invest in the integrity of their assets, optimising capability and capacity for future business opportunities.

## Consultancy & Personnel

We provide training and consultancy services for a variety of applications on a daily basis around the world.

- > **Client Representatives**
- > **Dive & ROV System Audits**
- > **Diving Technical Expertise**
- > **Offshore Personnel**

## Engineering Services

JFD operates engineering and manufacturing facilities in the UK, South Africa, Singapore and Australia offering support to small and large scale projects. JFD works alongside customers to provide efficient and effective maintenance support solutions.

- > **In-Service Support**
- > **Service+**
- > **Through-life Support**





# Services

## Testing Services

JFD is one of the largest and most diverse pressure testing providers in the world able to offer pressure testing capability up to 100bar within our large 3m x 8m Work Chamber and up to 800bar within our smaller chambers. We offer a comprehensive range of services for research, development and demonstration purposes ideal for equipment testing and manned trials.

- > Altitude Testing & Trials
- > Hyperbaric Welding
- > Pressure Testing & Trials
- > Test Tank

## Training Services

We provide a comprehensive range of world-class training courses within the commercial, defence and medical sectors which aim to improve the standard of subsea safety worldwide.

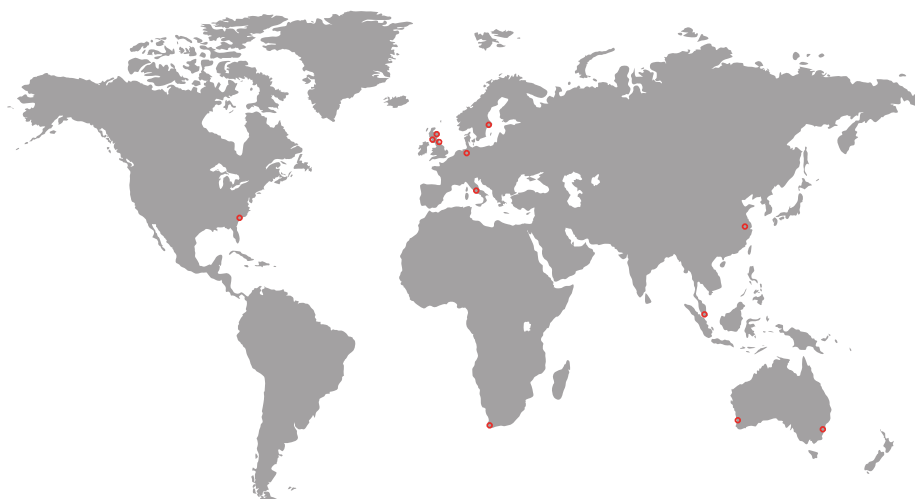
- > Commercial Development Courses
- > Equipment Operator & Maintainer Courses
- > Medical Courses



The background image shows a large industrial workshop. In the foreground, a long, cylindrical metal component, possibly a subsea pressure vessel or a large pipe, is lying horizontally. It has several flanges and is secured with yellow lifting straps. The component has markings like 'L01628-SG0911' and '106535-8229107'. In the background, a massive white cylindrical vessel is being worked on. Two workers in red suits and yellow hard hats are visible near the open end of this vessel. The facility has high ceilings with red steel beams and various industrial equipment.

## GLOBAL SAFETY

Pursuing its goal of improving the global standard of subsea safety, JFD supports diving operations with training, testing, in-service and emergency support, engineering, and consultants across the world.



Aberdeen | Bremen | Cape Town | Glasgow | Newcastle  
Perth | Rome | Singapore | Sydney | Vaxholm | Virginia | Wuhu