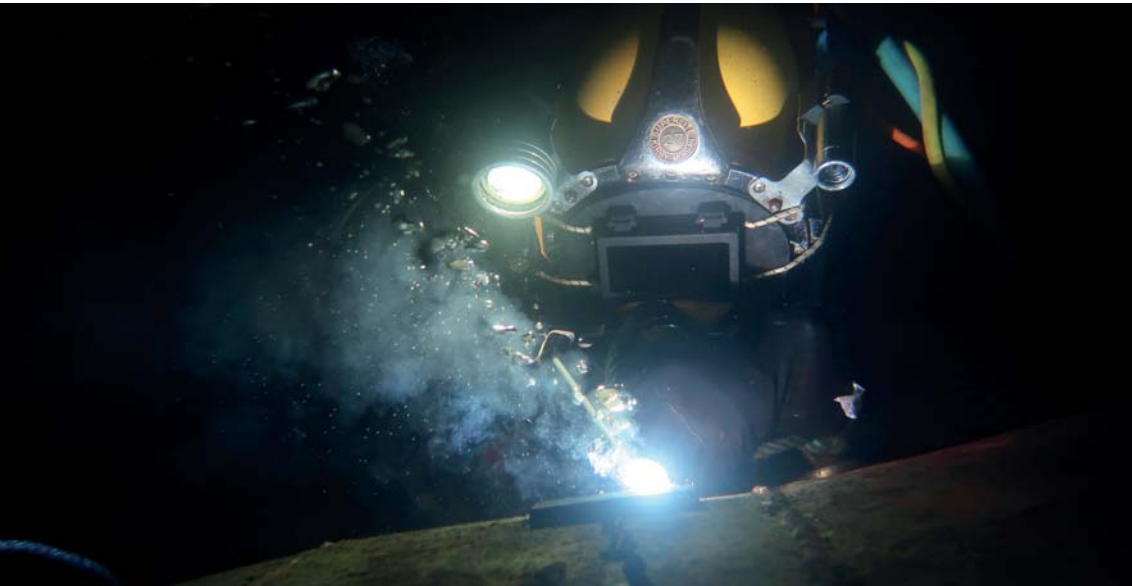


# Worldwide underwater repairs



**HYDREX**  
UNDERWATER TECHNOLOGY



# Worldwide underwater repairs

**W**hen we send a team to an operation, *any operation*, we have one goal in mind: to get the job done in the shortest possible time and to the highest standards. This has been our policy since Hydrex was founded in 1974.

We want to offer the highest quality of service for our customers. To achieve this we need staff who have familiarity with a wide range of operations as well as the relevant know-how. Our diver/technicians are trained and qualified to perform all class-approved repair procedures in even the harshest conditions.

This means that if a shipowner needs assistance, we are able to send a team of certified diver/technicians to the vessel immediately. They can carry out both simple and complex jobs. They do this uniformly without unnecessary loss of time, quality or safety.

Having a team you can depend on is off course not enough. That is why we have built long-lasting relationships with classification societies, OEMs and local support bases around the world. This allows us to quickly arrange spare parts, an engineer from the OEM or any external equipment needed for an operation.

We understand how important it is for a ship to keep her schedule. Going off-hire for days or even weeks to have underwater repairs carried out or pay an unscheduled visit to a drydock costs a tremendous amount of money. That is why we have developed technologies that allow us to perform underwater repairs within a very short time and to drydock standards.

In this brochure we give you a summary of the most important underwater repair services we offer. Feel free to click on the provided links for more information on a specific service. You can also contact us with any question you might have. Our technical advisors will give you fast and clear answers and will let you know whether an underwater solution is possible.



Boud Van Rompay



Underwater services and technology approved by:



**BUREAU  
VERITAS**



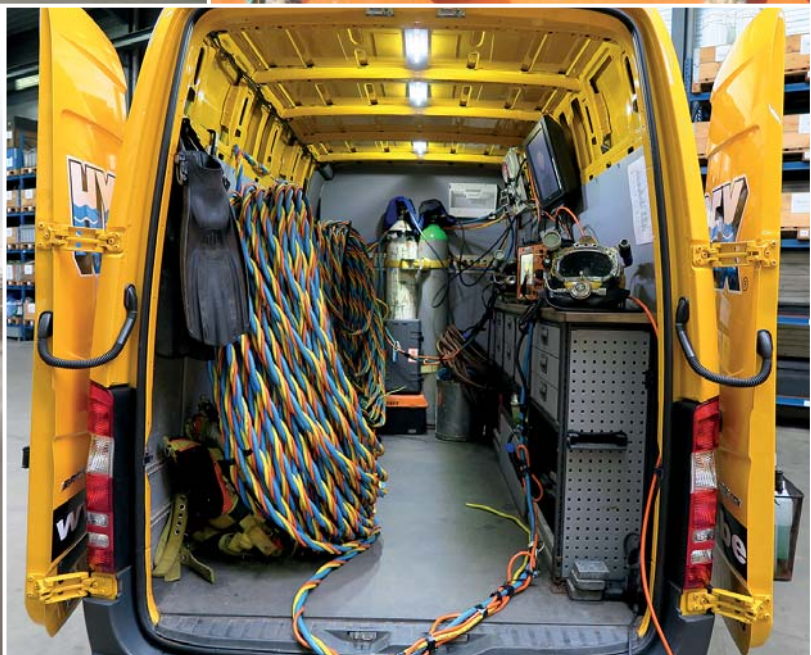
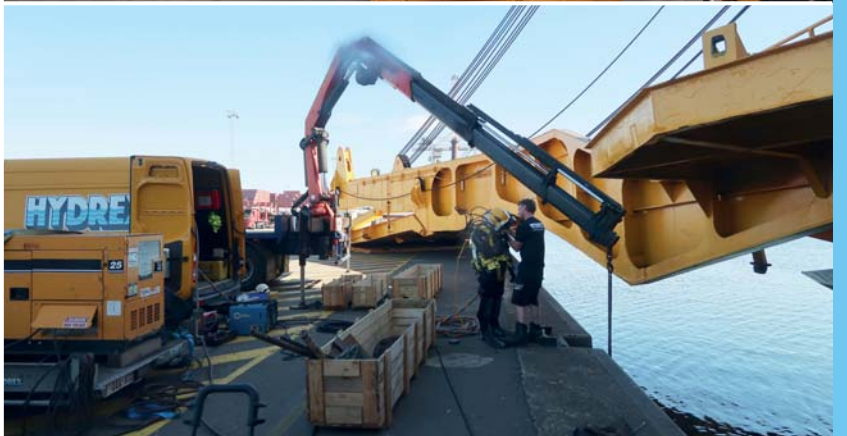
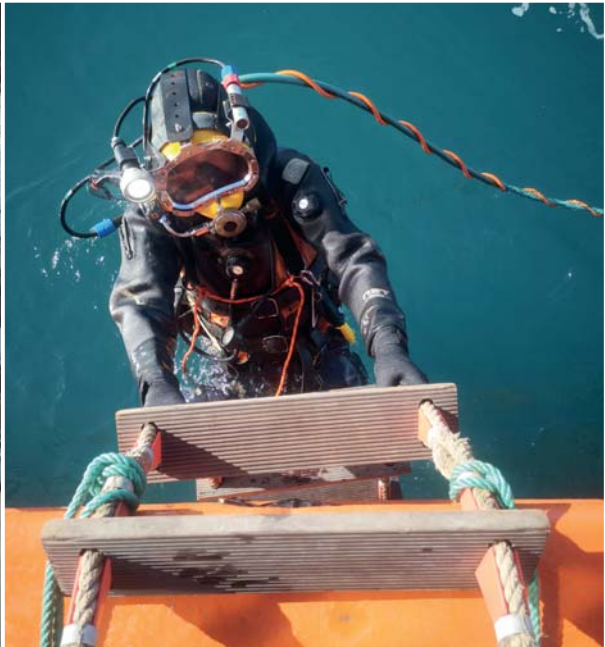
ISO 9001 : 2015

**ClassNK**





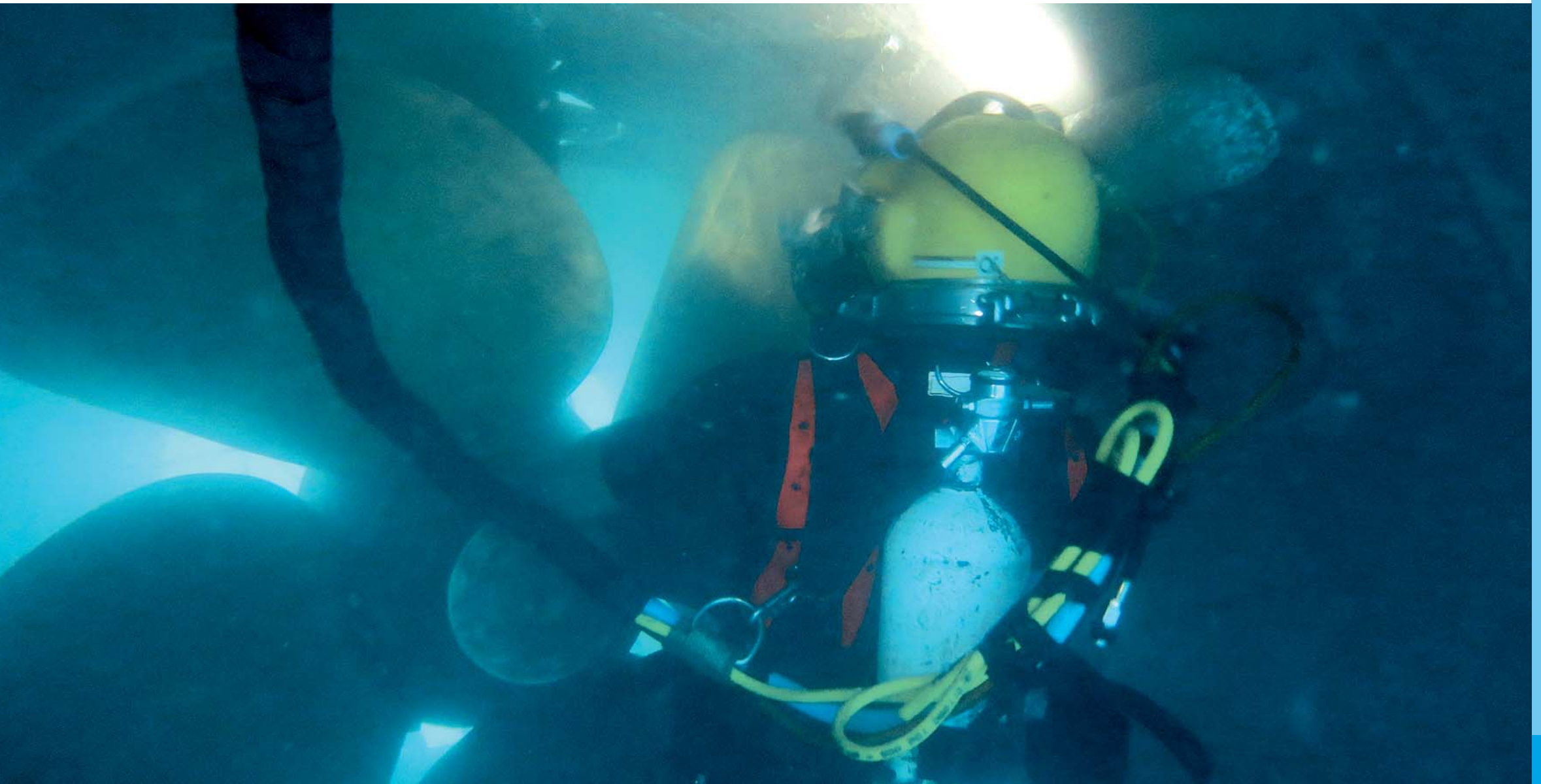
# Always ready for high-quality in-water repairs





# Bow thruster repairs and replacements

- Underwater repair and maintenance work in dry and wet conditions
- Replacement or overhaul of full units
- Flexible mobdocks adaptable to tunnel size and ready for mobilization
- Thruster blade exchange
- In cooperation with OEMs
- **Click here** to view an animation of the procedure





# Bow thruster repairs and replacements





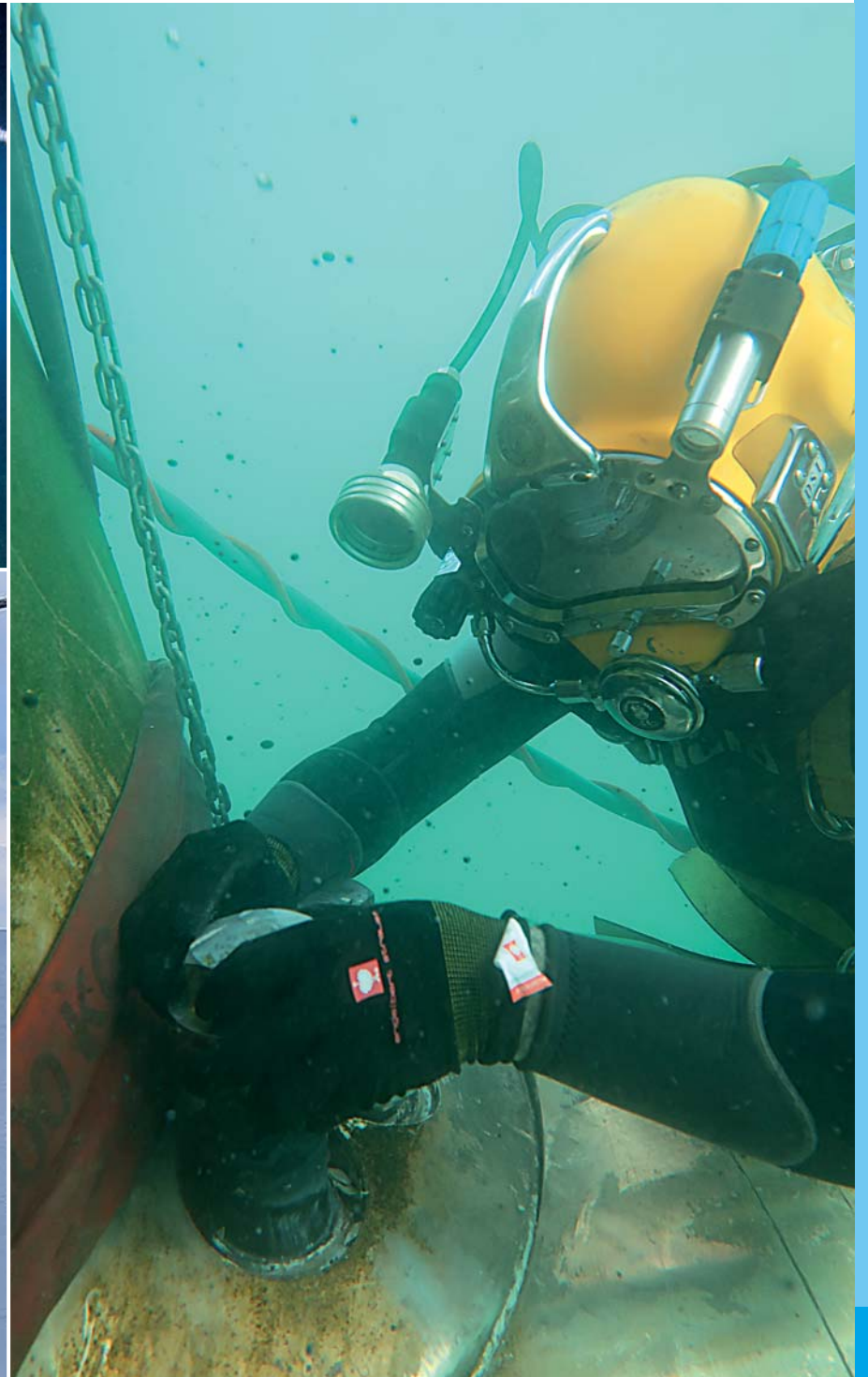
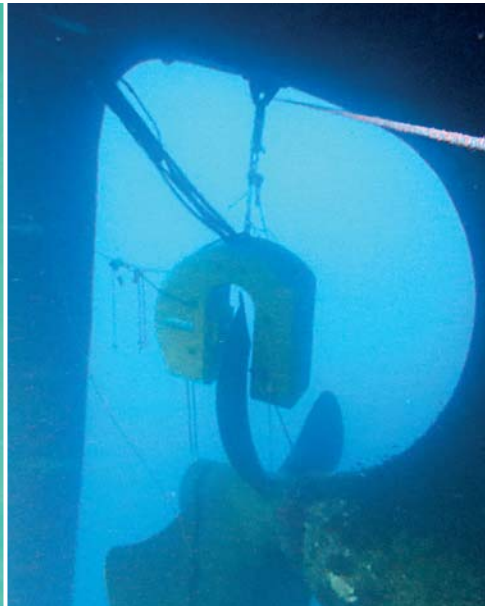
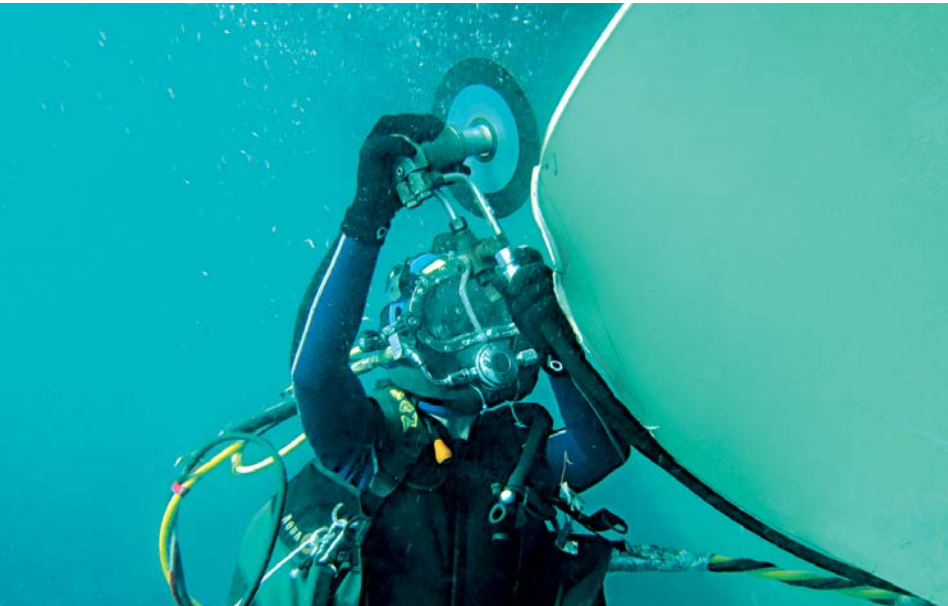
# Propeller repairs and replacements

- In-house developed cold straightening and cutting equipment
- Underwater or trimmed
- Balancing of propellers
- Afloat blade replacement
- Propeller modifications to improve efficiency
- Propeller cone fin installation to achieve fuel savings
- **Click here** for more information





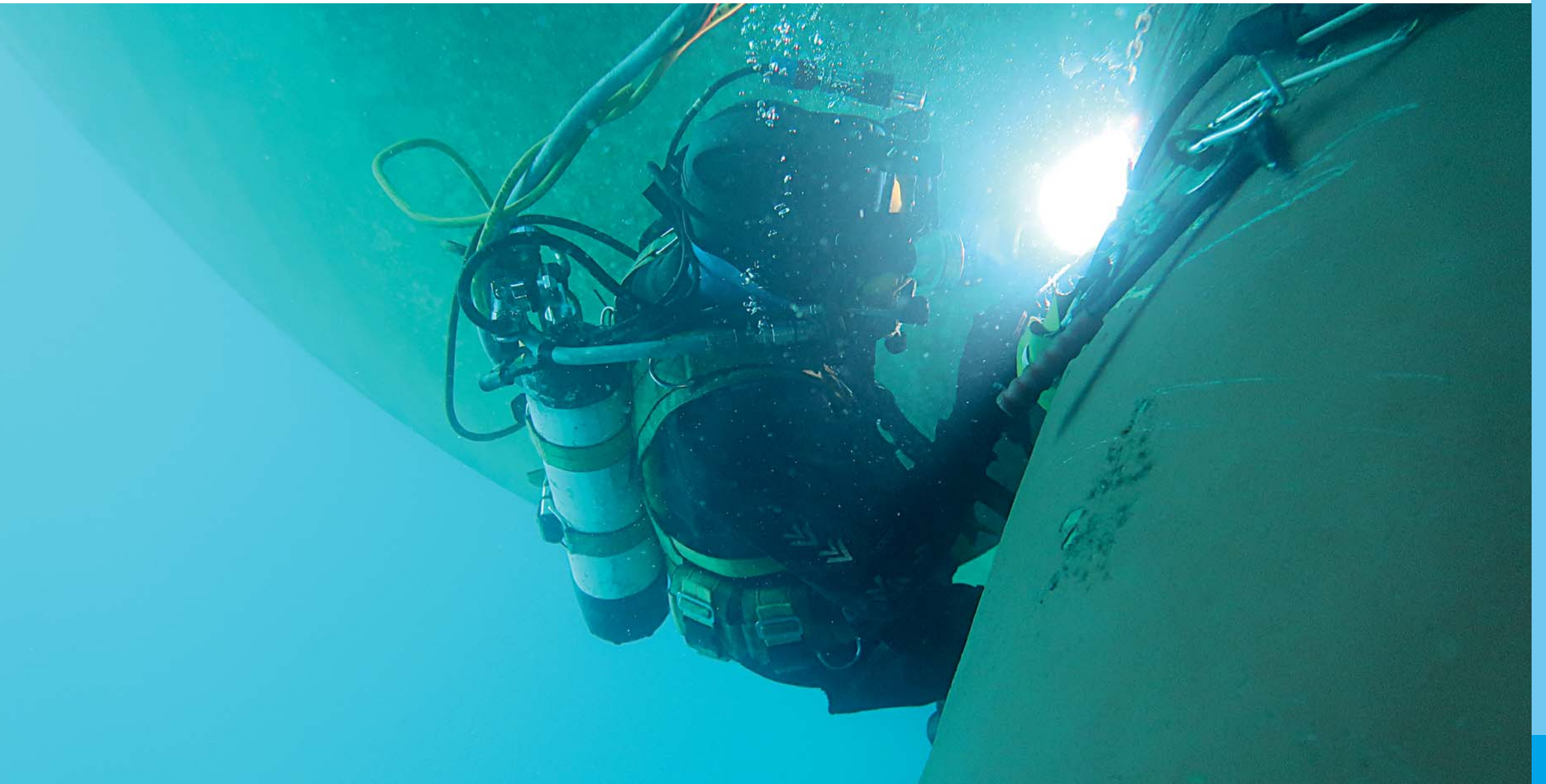
# Propeller repairs and replacements





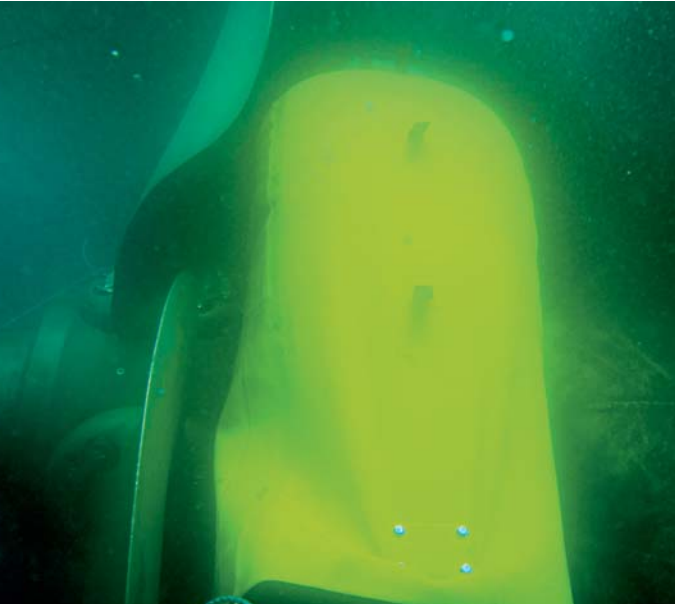
# Stern tube seal repairs

- Replacement of various types of shaft seals
- Flexible mobdocks adaptable to all kinds of seal assemblies
- Carried out underwater in dry conditions
- In cooperation with seal manufacturers
- **Click here** to view an animation of the procedure





# Stern tube seal repairs





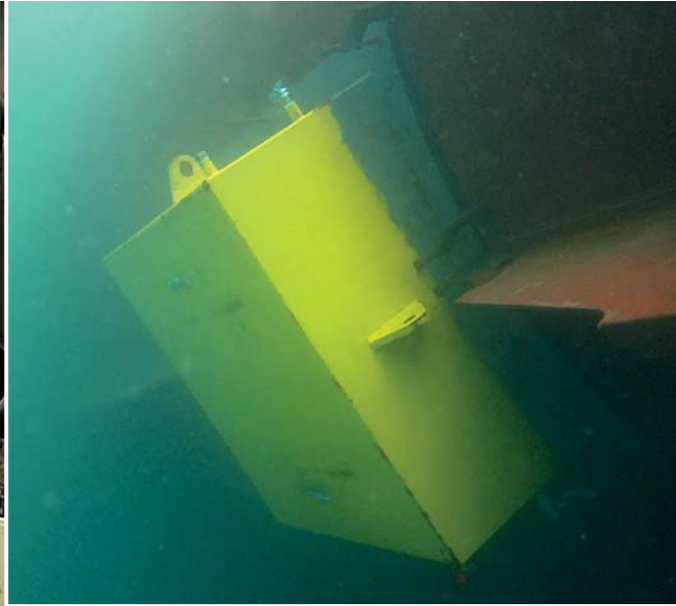
# Hull repairs - dry welding

- Replacement of deformed or damaged hull plating
- Permanent insert installation
- Class approved
- Using tailor-made mobdocks/cofferdams
- Commercial operations can continue during repairs
- Sea chest installation
- Scrubber overboard repairs
- **Click here** for more information





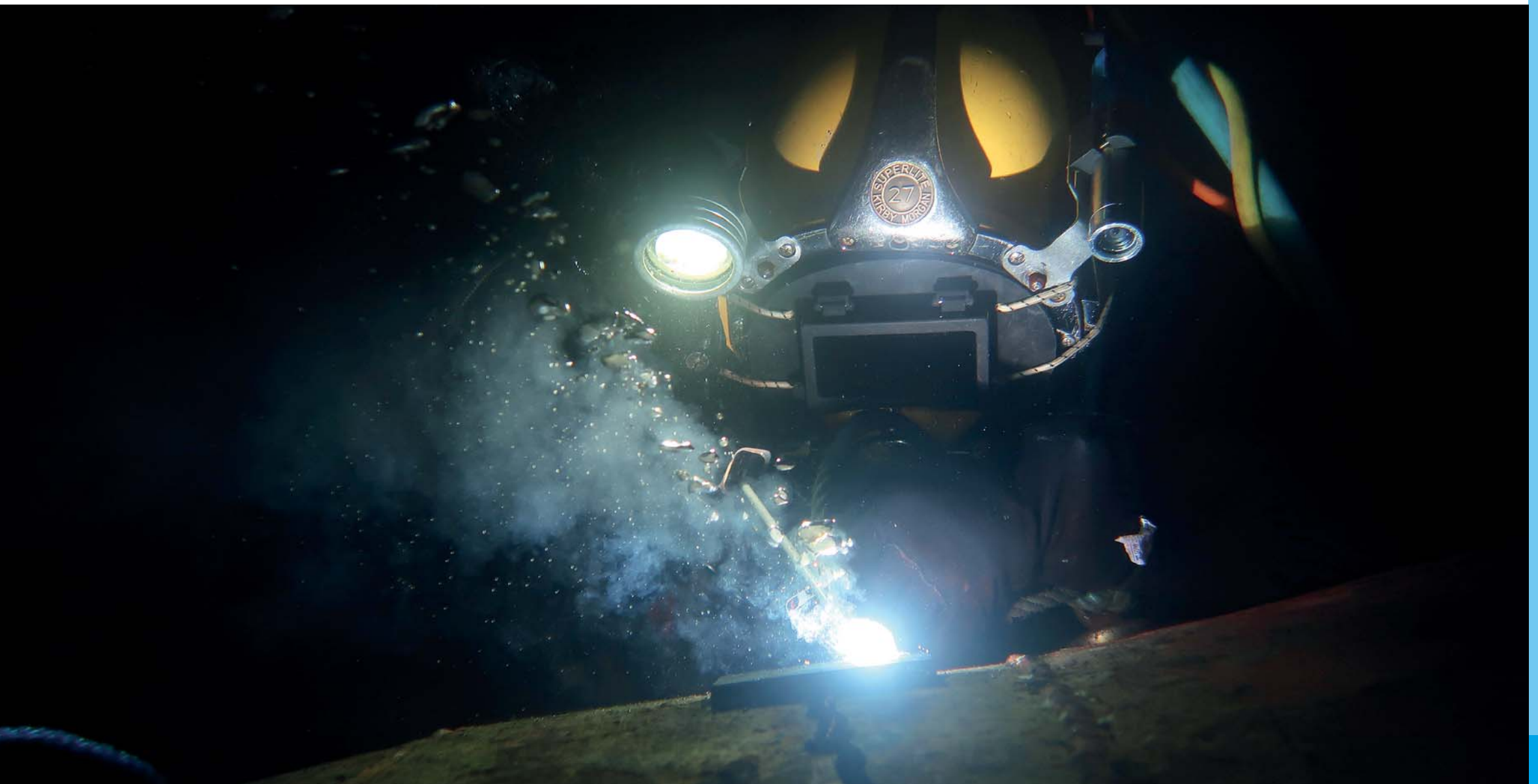
# Hull repairs - dry welding





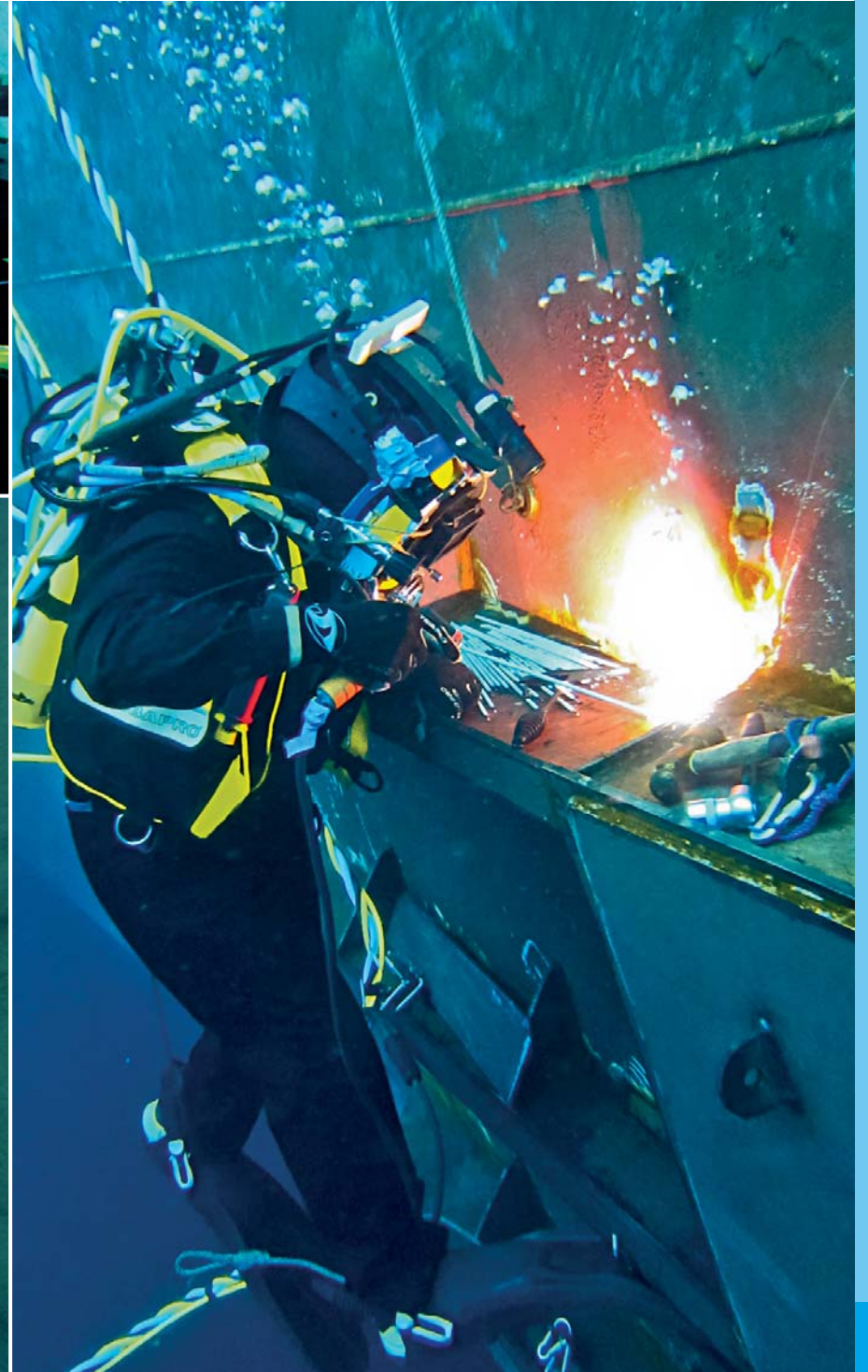
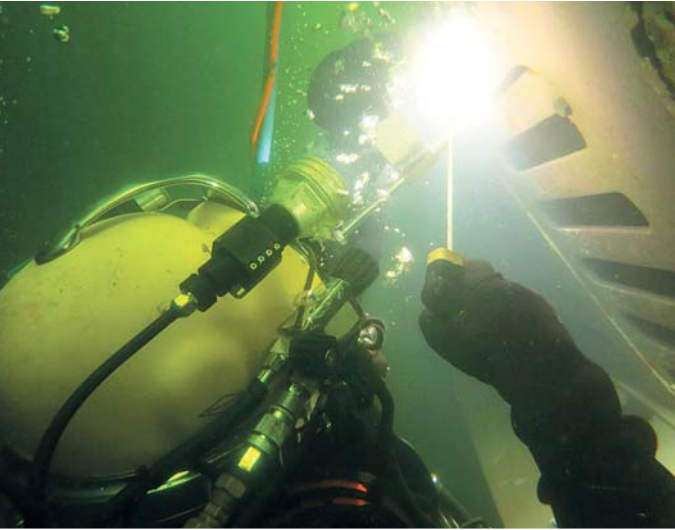
# Hull repairs - wet welding

- Classification certified grade A wet welding
- Cavitation or corrosion damage repair on rudders
- Clad welding
- Rope guard repairs
- Mewis Duct repairs
- Doubler plate installation
- Ships can keep a clean class certificate
- Commercial operations can continue during repairs
- **Click here** for more information





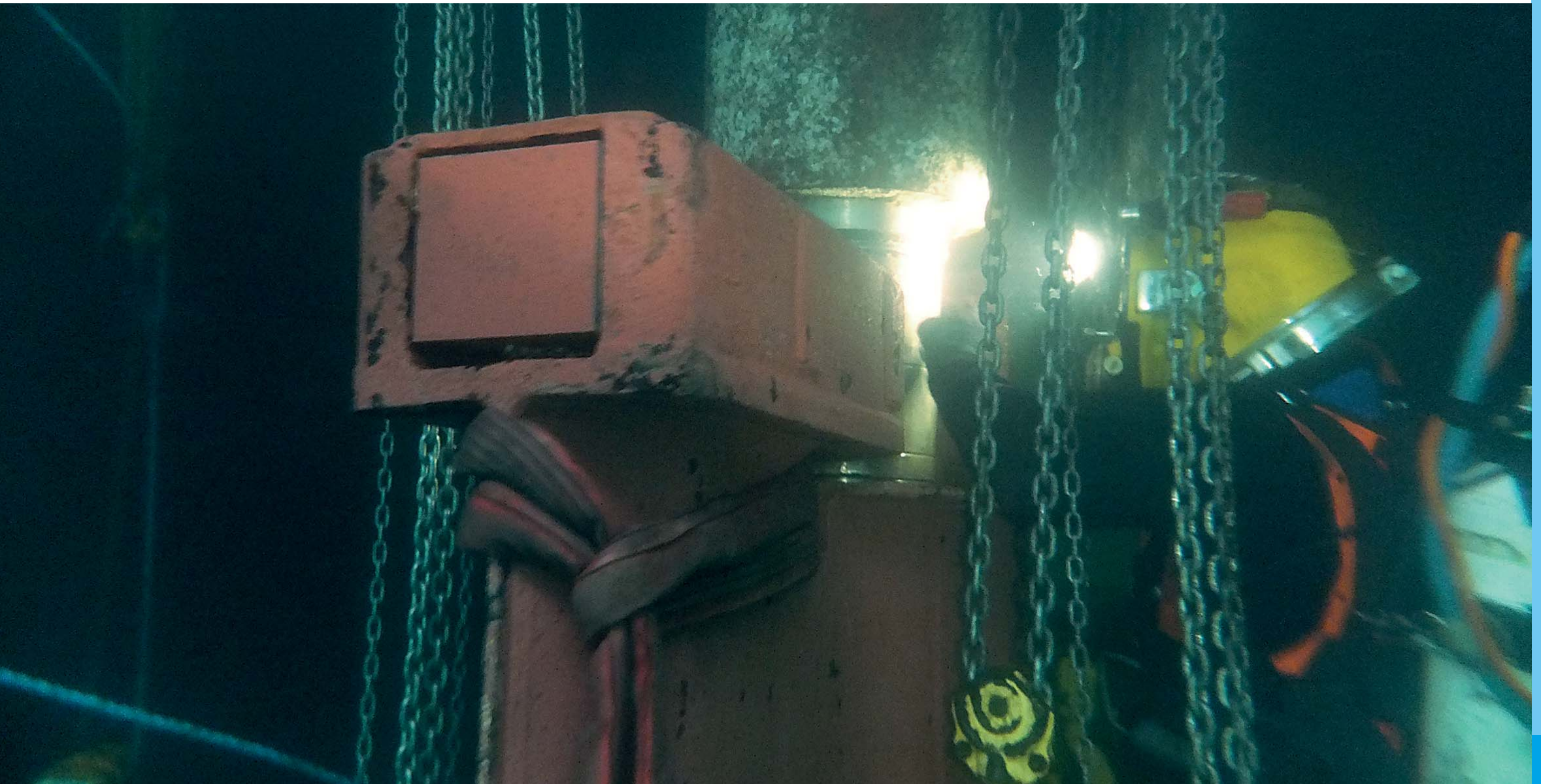
# Hull repairs - wet welding





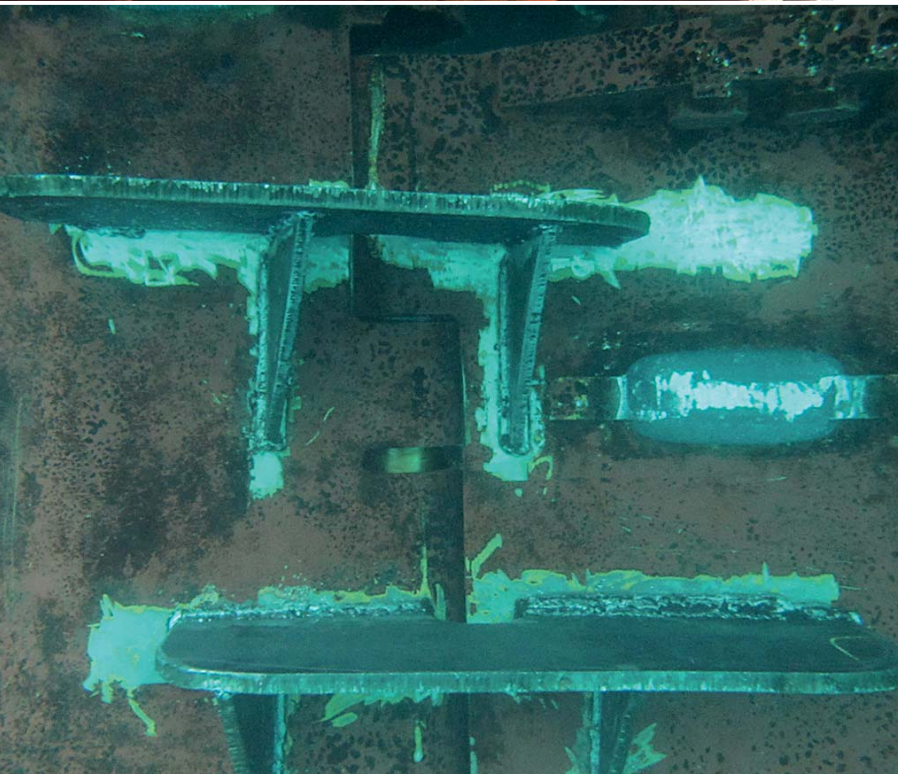
# Rudder repairs

- Afloat permanent repairs on any type of rudder
- In-house developed equipment allows engineers and inspectors to perform their tasks in dry conditions
- Cavitation repairs
- **Click here** for more information





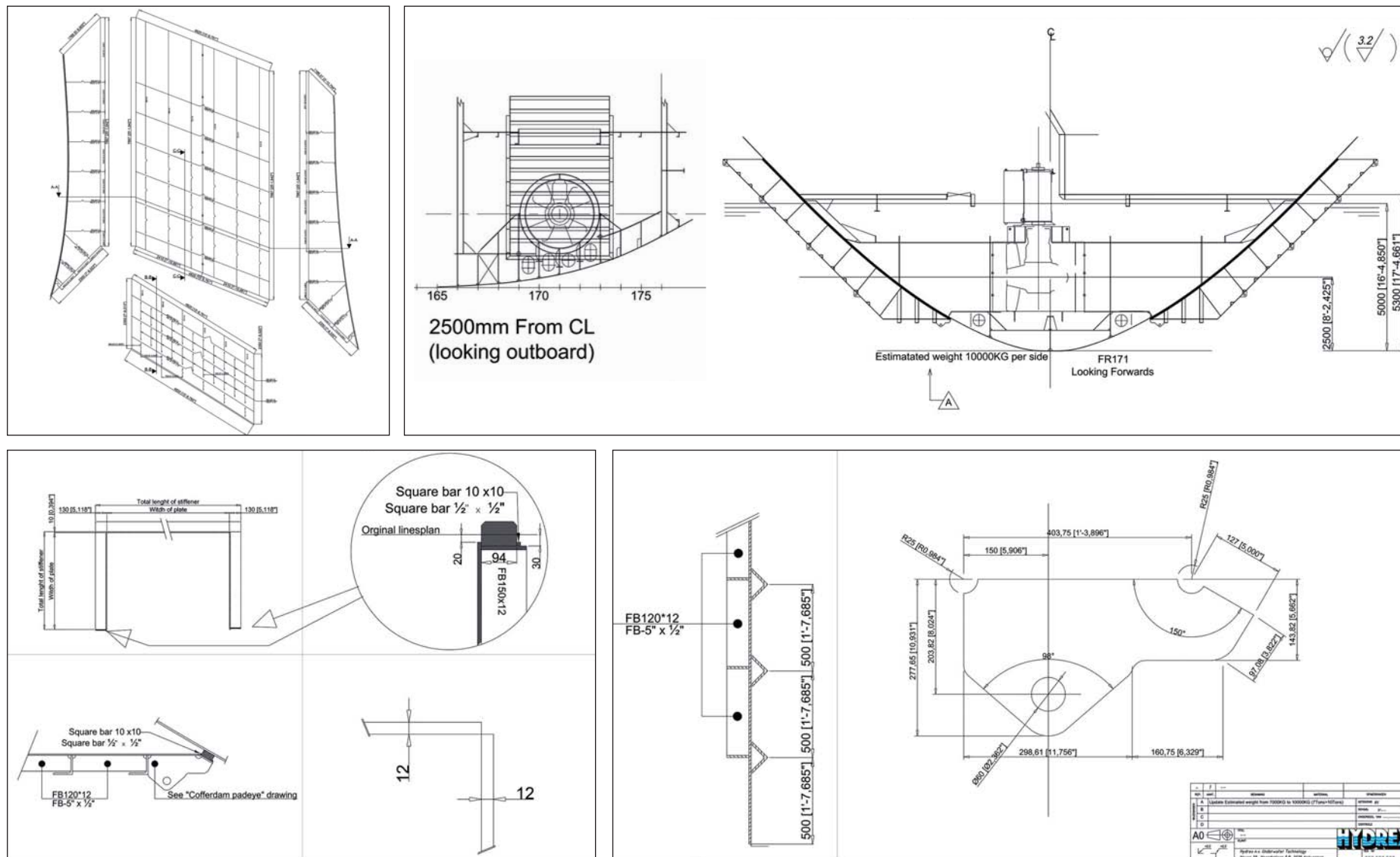
# Rudder repairs





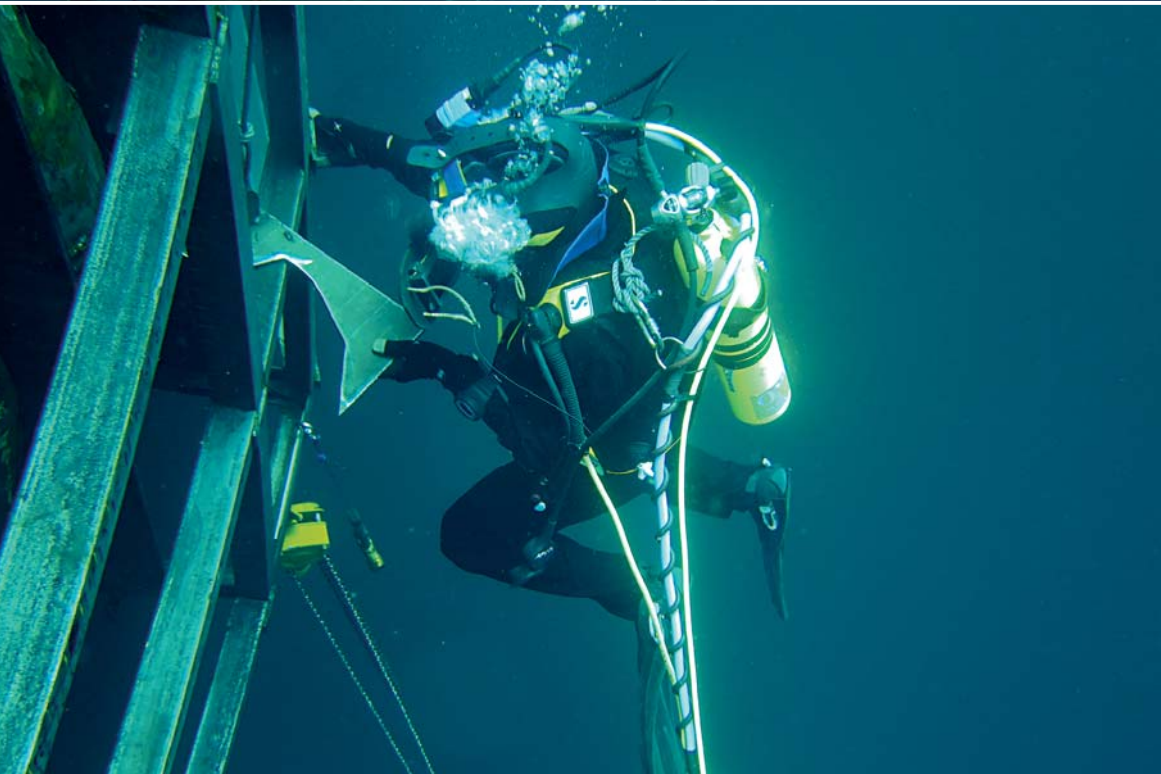
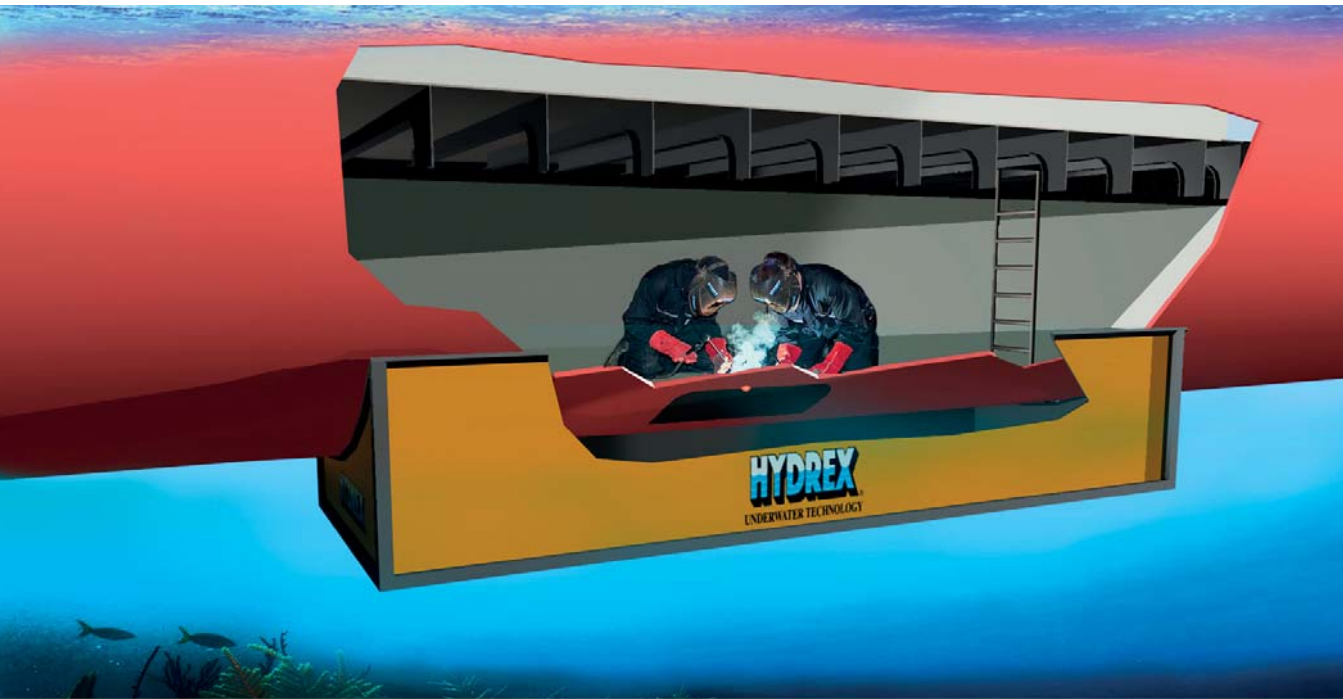
# In-house developed custom solutions

- We take care of the engineering aspects of an operation
- Using knowledgeable engineering and advanced underwater technology
- We find the most efficient solution
- Out of drydock
- This reduces cost and off-hire time for ship owners
- [Click here](#) for more information





# In-house developed custom solutions





# High quality in-water ship repair and fuel saving services

**Permanent insert repairs**  
Specialist class approved insert repair work carried out on a permanent basis. Providing a real alternative to drydock.

**Emergency repairs**  
Fast response emergency repairs worldwide.

**Inwater video inspections**  
Professional video surveys provide a reality of the problem and enable owners and classification surveyors to directly diagnose any problems.

## KEEPING SHIPS IN BUSINESS



**Echo sounder inspection and replacement**

**Speed log**  
Checks for damage, marine fouling and replacement.

**Bow thruster and propellers**  
Permanent on-site repair, maintenance and replacement with the award winning flexible mobdock technique.

**Hull cleaning on suitable coatings**

**Bilge keel**  
Check and repair broken welds, renewal of sacrificial anodes.

**Sea valves, sea chests and gratings**  
In-water inspection, cleaning and repair of intakes and valves, installation of new sea chests, condensers and coolers afloat.

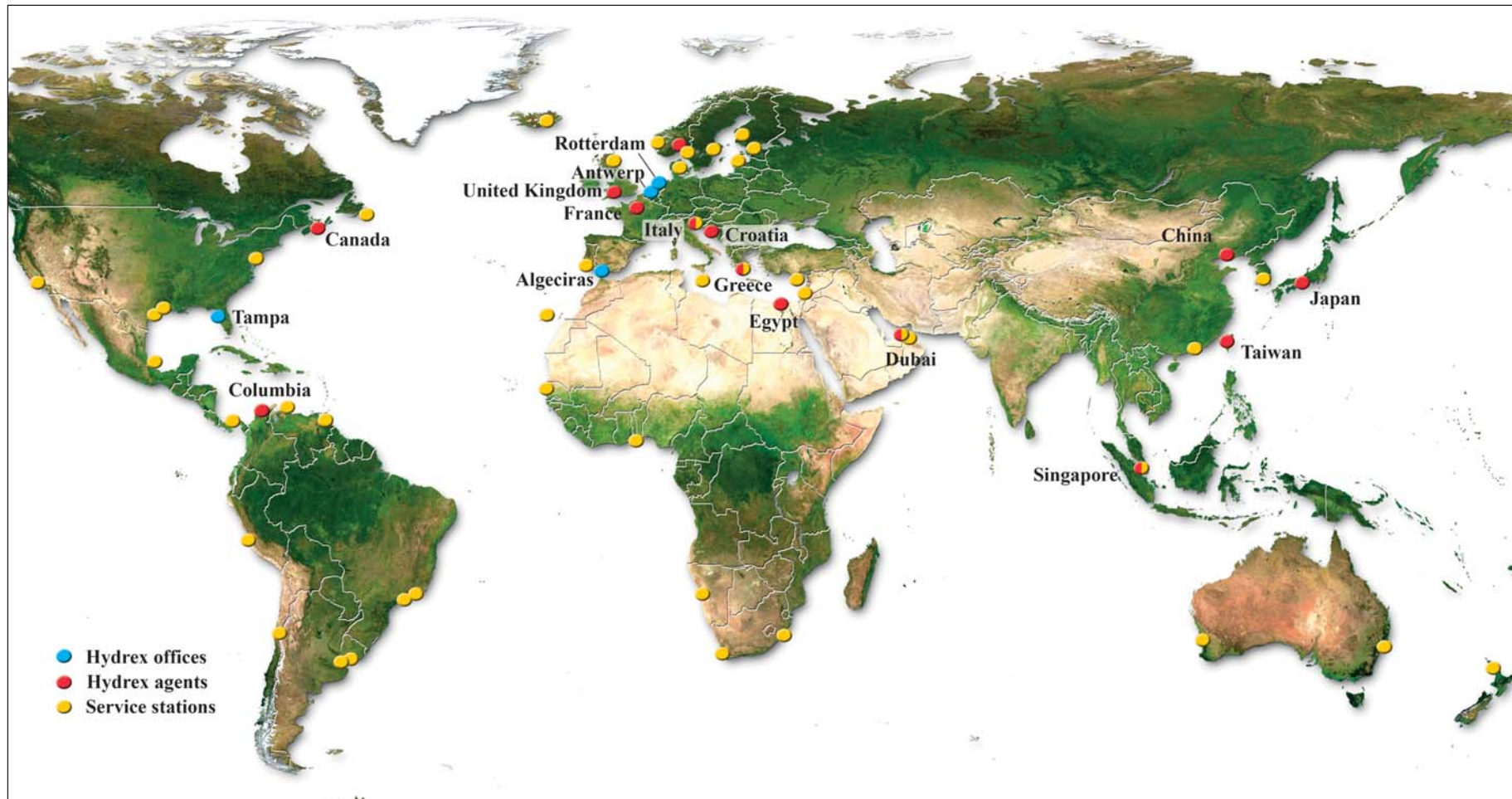
**Stern tube seal replacement**  
Permanent inwater stern tube seal replacements and repairs with the unique Hydrex flexible mobdock technique.

**Propeller operations**  
Propeller cleaning with special tools, on-site blade straightening and cropping. Permanent repairs to all types of propellers or installation of propeller cone fins.

**Rudder repairs**  
Permanent on-site repairs on all types of rudders with groundbreaking new technology.

**Pintle and bushing repair and replacements**





*You can also find and overview of our network of agents on our website: [www.hydrex.be/contact](http://www.hydrex.be/contact)*

# Keeping ships in business

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