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Hydrex expands further to keep improving its services

Since the company was founded in 1974, Hydrex has never stopped looking for new ways to assist shipowners. As our services and capabilities have grown, so have the facilities and equipment supporting our teams. The aim behind these investments has remained the same: to give our staff the best possible working environment and provide customers with fast, safe and high-quality solutions.

This continuous development has been a recurring theme throughout Hydrex's history. Previous expansions of our Antwerp headquarters included new offices and meeting rooms, refurbished warehouses, additional workshop and training facilities and increased dock space. Later investments further expanded these facilities, ensuring that our teams had the space, equipment and logistical support needed for a swift



State-of-the-art new welding facility for our diver/technicians.

response to operations around the world.

Hydrex has now taken another step forward with several major additions and upgrades at its headquarters in Antwerp.

Innovative welding facilities

One of the most important additions is a new, dedicated combined welding training and production center for our diver/technicians. The building contains several individual cubicles where they can practice and further develop their welding skills in a controlled environment.

The facility also gives our teams a dedicated location to prepare material for upcoming operations. Steel plates, pipes and other components required for a job can be welded, cut and prepared in-house before mobilization.

The new workshop is state-of-the-art and has been constructed according to strict safety guidelines, with the welfare of our personnel as the first priority. It is equipped with the latest high-quality welding and cutting equipment, giving our diver/techni-



Construction of the new facility took place earlier this year.



The new welding center has been designed with the strictest safety guidelines in mind.



Large touchscreens and screens for video meetings have been installed in the new offices of our senior divers.



A new completely refurbished warehouse has been added to our headquarters.

cians the tools and equipment they need both for training and for actual fabrication.

This investment continues an approach that has always been central to Hydrex. Our diver/technicians do not only need technical knowledge and practical experience; they also need the right equipment and an environment in which they can maintain and improve their skills. Hydrex's facilities have therefore long combined operational workshops with dedicated training infrastructure.

By bringing training, preparation and fabrication together under one roof at our headquarters, we can further improve the efficiency with which our teams prepare for an operation.

Improved communication facilities

The expansion is not limited to our technical and practical facilities. New offices have also been installed for our chief and senior divers as well as our team leaders.

The offices provide them with an improved working environment from which they can prepare and coordinate operations. Large screens have been installed for video meetings with customers and prospects, making it easier to discuss upcoming jobs, technical requirements and possible solutions directly with everyone involved.

Similar screens have been installed in our meeting rooms and technical department. Communication between the different people involved in an operation is essential, particularly when a fast response is required. Our technical department, team leaders and diver/technicians work



Subsea Industries engineers at work in the new warehouse.

closely together to prepare jobs and make sure that the correct personnel, equipment and procedures are available.

The new communication facilities also make it easier to involve customers directly in these discussions, wherever they are located. This is particularly valuable for an international company whose teams carry out operations around the world and that is constantly developing new ways to assist shipowners.

Pioneers in innovation

Innovations which help keep the world fleet afloat, in business and out of drydock are very valuable to shipowners and managers. We have been at the forefront of such innovations for over 50 years. Most of these pioneering innovations have become standard practices in the industry.

Innovative standard procedures are developed when a unique situation

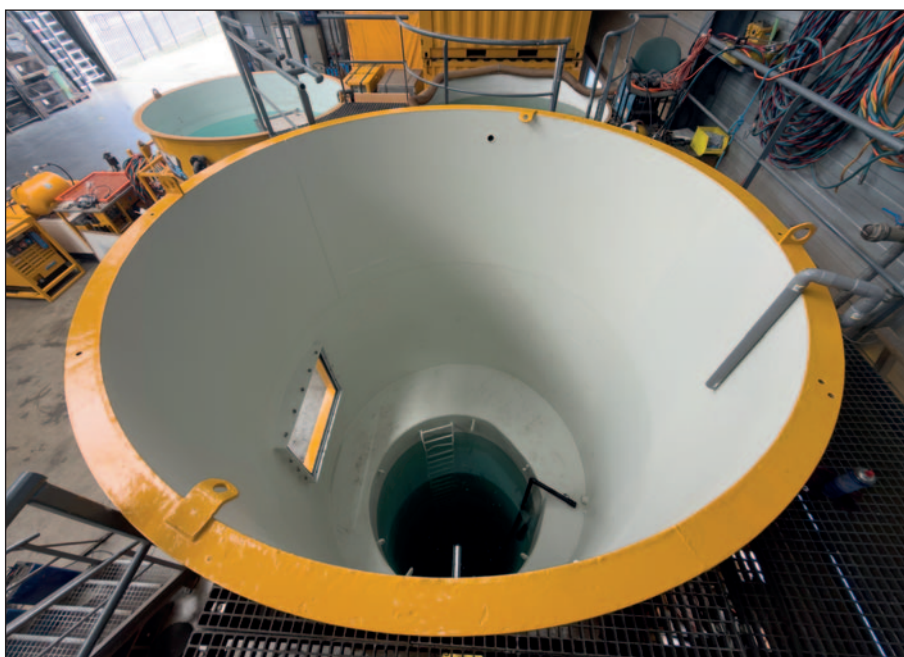
Permanent in-water rudder repairs now possible without drydocking



Hydrex has developed an entirely new method enabling permanent repairs of rudders without drydocking the ship. Permanent repairs were hitherto not possible and ships had to drydock in case a major defect was found. The newly designed equipment is light-weight and can be mobilized very rapidly in our special flight containers.

Major defects on rudders very often cause unscheduled drydocking of ships. The new method designed by our technical department allows engineers, welders and inspectors to perform their tasks in dry conditions. Class approved permanent repairs on-site, without moving the ship, are now possible and commercial operations can continue. Steel repairs and replacements can be performed and pintle and bushing defects can be solved without the loss of time and money associated with drydocking.

The equipment can be mobilized within hours to any port in the world and is available for rapid mobilization from the Hydrex headquarters in Antwerp.



The diving tanks have also been renewed.

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Front view of the Hydrex headquarters in Antwerp.

arises. Hydrex engineers have the necessary training and experience to think on their feet and solve the unusual problems that come up when dealing with underwater repairs on ships. This drives continuous innovation.

Additional warehouse for Subsea Industries equipment

A new plant has also been added to the Hydrex headquarters. An existing warehouse has been completely remodeled and stocked with the tools and equipment needed for the production of cleaning units manufactured by Hydrex's sister company, Subsea Industries.

The additional facility provides a dedicated location where this production can be housed and organized efficiently. It represents a significant expansion to this vital department of Subsea Industries. It is another example of how the available space at the Antwerp headquarters continues to evolve in line with the requirements of both companies.

Well-stocked depots and readily available equipment have always played an important role in the Hydrex approach. A swift reaction remains one of the key elements of our service, and having the necessary tools and equipment available at our headquarters helps our teams

prepare and mobilize without unnecessary delay. Previous expansions were carried out for precisely this reason: combining offices, advanced warehouses, workshops and logistical facilities enables Hydrex to provide customers with fast and cost-effective solutions.

Investing in our people and our service

Every few years our facilities, equipment and fleet are reviewed, refurbished or replaced where needed. Our vans, for example, are regularly updated so that they remain state-of-the-art mobile monitoring stations. The latest expansion of our headquarters follows the same philosophy.

Whether it is a new welding and cutting facility, improved offices and communication equipment or additional warehouse capacity, each investment has a practical purpose. It gives our personnel better tools and working conditions while strengthening the support behind every Hydrex operation.

Our constantly developing range of services requires capable and well-trained staff, from the technical department responsible for planning and engineering to the diver/technicians carrying out the work on-site. Providing them with the best possible working environment helps them deliver the quality our customers ex-

pect. This principle has guided previous expansions of the company and continues to guide us today.

Ultimately, the reason for continuing to invest in our headquarters is the same as it has always been: our customers. Hydrex wants to provide the fastest and most cost-effective solution possible while maintaining the highest standards of safety and quality.

The new facilities at our Antwerp headquarters give our teams even more possibilities to train, prepare, communicate and mobilize efficiently. They are the latest step in an ongoing process of improvement that helps Hydrex continue doing what it has been doing for over five decades: keeping ships in business. ■

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or at + 32 3 213 53 00

**KEEPING SHIPS
IN BUSINESS**



*A ship that needs repairs
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anywhere, anytime.
We promise quality
and deliver it.*



Internal cofferdam repairs on barge in the Netherlands

In June a Hydrex team carried out temporary hull repairs offshore on a 67-meter shallow-water barge during its stay in Norderney and Delfzijl. Challenging weather and sea conditions required the team to adapt the original repair plan and find an alternative solution that could be carried out safely.

The damaged areas were located in void tank 4 and void tank 6. The initial plan called for three steel doubler plates to be installed externally over the affected areas. Rough sea conditions, however, made it impossible to safely bring the diving equipment on board.



Concrete box installed over the damaged area by the crew.



Cutting a section of one of the three cofferdams.

Rather than wait for conditions to improve, our technical team revised the repair method. It was decided to carry out the work internally and install three reinforced steel cofferdams over the damaged areas.

Internal repair in void tank 4

The vessel's crew had already installed a concrete box over the damaged area. Our technicians used this as the basis for the temporary repair and constructed a steel cofferdam on the inside of the tank, directly over the concrete box.

The cofferdam, measuring 1550 x 1915 mm, was fabricated from 8 mm steel plating. Reinforcing steel frames were welded to its outside to provide additional structural strength. All mouseholes were closed with small steel plates to



Cutting work on the edges of the cofferdam in void tank 4.



The cofferdam was constructed in sections, following the shape of the hull.



Hydrex certified welders installing steel frames to reinforce the cofferdam.



Cofferdam ready and approved by the independent inspector.

make the repair completely watertight.

Once the welding had been completed, all welds were examined and approved by an independent third-party inspector using Magnetic Particle Inspection (MPI).

Two cofferdams installed in void tank 6

A similar solution was used for the two damaged areas in void tank 6. Prior to our team's arrival, the vessel's crew had installed two concrete boxes over these areas.

Our technicians fabricated two separate steel cofferdams around the existing concrete boxes. As with the repair in void tank 4, both cofferdams were constructed using 8 mm steel plating.

The cofferdams measured 1000 x 1000 mm and 1000 x 980 mm respectively. Additional steel stiffening frames were welded onto the cofferdams to increase their strength and rigidity.

After the welding work was finish-



Hydrex welders working on one of the cofferdams in void tank 6.



MPI carried out by an independent inspector.



During the operation our team performed some small additional work for the customer, like installing new pad-eyes on the side of the hull.

ed, the welds on both cofferdams were subjected to MPI and approved by an independent third-party inspector.

Adapting to the circumstances

Flexibility is essential during repair operations, especially when weather conditions make the original approach impossible to carry out safely.

For the barge, the initial plan for an external repair had to be changed because of the severe sea conditions. By switching to internally installed steel cofferdams, our team was able to provide a suitable temporary solution as a viable workaround to the planned underwater operation.

All three cofferdams were reinforced to provide a strong, watertight repair and the completed welds successfully passed independent inspection. ■



Two cofferdams were installed in the void tank 6.

If you are faced with unexpected (hull) damage on your vessel, contact us. Our technical department is available 24/7 to evaluate the situation and find the best repair solution.

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