Reminiscences

The first Hydrex magazine was published in 1975, just a year after the company was founded. It was always my intention to create a dedicated publication because we were working on so many new ideas.

This first issue was more of a leaflet than a real magazine. In the early years publication was very sporadic. The means we had at that time were limited and we didn't have a separate promo division then. We created a newsletter when we had something really important to share.

At the end of the eighties we started to write more regular magazines. We wanted to increase our impact on the shipping industry in general and help the industry to become more ecological. To do this we needed to strengthen our position. The magazine was a key factor in achieving this. We increased the frequency from a quarterly publication to a monthly one by the end of the nineties. It has been published every month ever since.

The very first magazines

The early issues of the Hydrex magazine are unfortunately lost, but the pictures used remain. One of the very first operations that was written about was the prefabricated cofferdam repair on m/v *Lunar Venture*.

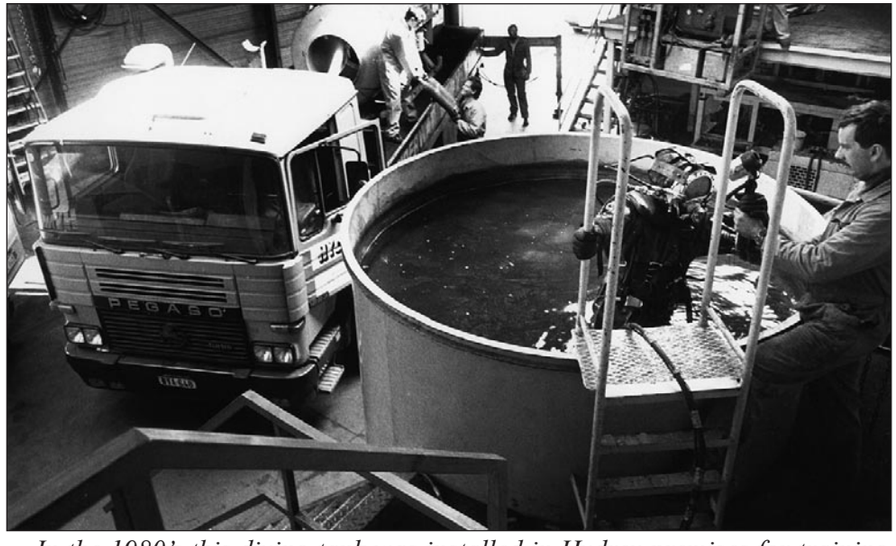
The ship had suffered a very large gash in its double bottom and Hydrex was asked to find an on-site solution. Because the available options were not good enough a revolutionary new technique needed to be used: a prefabricated cofferdam.

In 1979 it might have looked like youthful arrogance to people in the shipping business but as with most ideas introduced by Hydrex, it led to the development of a repair technique still in general use today.

The cofferdam filled with water, allowing it to sink. Later it was dewatered with compressed air and gained positive buoyancy.

Diver in hard hat diving suit.

Hydrex headquarters in the early days.



In the 1980's this diving tank was installed in Hydrex premises for training purposes.

From black and white to color

During the eighties the Hydrex magazine was printed only once a year, but by the time the nineties arrived it had changed into a quarterly publication. In 1993 color was introduced, first only now and then but soon the magazine was in full color.

The purpose remained the same: To inform our customers and prospects of the operations our teams performed around the world and to share with them all the latest news.

HYDREX NEWS N° 14/90

No 14/september 1990
A quarterly publication edited by
Hydrex n.v.
Asiadok Kaai 29B
B-2030 Antwerp

A newsletter for shipowners, their technical managers and superintendents on the economics of underwater ship maintenance

tel. 03/233.53.51
Tx 33 755 HYDREX B
Fax. 03/233.42.55

Hydrex Flying Squads

Hydrex is famed for its speed of reaction and intervention - anywhere in the world, and at very short notice. Cameroun, Rio de Janeiro, Santa Cruz de Tenerife, U.K., West-Germany - Hydrex flying squads service ships throughout the world.

Hydrex mobilised personnel and equipment to carry out an inspection of major hull dam... Rio de Janeiro

MAY: DAMAGE ASSESSMENT IN RIO DE JANEIRO.
In May, a team of divers flew over to Rio de Janeiro for an extended inspection of major hull damage on board a 66 350 dwt bulk carrier.

MAY: BREMERHAVEN, WEST GERMANY.
Also in May, Hydrex repaired a crack in the shell plating on the flat bottom of a 3 022 dwt general cargo vessel. The crack was located in area of the engine room and repaired by welding a doubler plate on the damaged area.

JUNE: HULL SURVEY IN SANTA CRUZ DE TENERIFE.
From June 16th to June 22nd, diving teams carried out an underwater survey of the damaged hull of a 22 138 RoRo cargo vessel in Santa Cruz. After the inspection report, tempor... derwater repairs were carried

JULY: PROPELLER POLIS... IN PORT TALBOT, UK.
In July, again a Hydrex team c... was on the move. This time to t... coast of the UK to polish t... bladed propeller of a 143 745 d... carrier.

New address for Hydrex UK.
Our UK office has changed its address t... 55, 57 Aldershot Roa... Fleet, Hampshire GU13 ... telex nr. 858022
Telephone and fax num... remain unchanged.

UNDERWATER FLASHLIGHTS

We are happy to inform our readers that our forwarding department is busy sending the Mitylite underwater flashlights to 100 readers of our Newsletter. Answering cards have been received from all over the world. We wish to thank you for the numerous forms which have been sent back. They allow us to keep you informed on the subjects which are of interest to you.
In the present Newsletter, we focus on the subject underwater repairs which seems to be of particular interest to our readers.

NEW COMPUTER LINKED VIDEO UNIT

In September 1989, Hydrex acquired a sophisticated mobile video/computer installation for use with major surveys. The installation consists of a fully mobile unit comprising video recorder, television screens, computer and power generator for the TV camera unit. This installation permits the TV technician to type the comments of the diver immediately onto the video tape. After an inspection, the screen will simultaneously present the inspected areas, the oral information and the written comments.

HYDREX AT YOUR SERVICE

For some years already Hydrex has been operating offices in Holland, Belgium and France, coordinated through our central Antwerp office.

In addition to our own offices plus equipment depots in Belgium, Holland ,France and U.K., we have an equipment depot at Lisbon, jointly operated with Messrs. Repropel (50/50 Lisnave and Lips Drunen).

Hydrex also established partnerships with Semco Marine, Singapore, and Hydrospace of Dubai. Agents range from south to north and east to west. Hydrex is at your service via a vast network of agencies (◆), associations (✓) and own Hydrex offices.

- ◆ **Farnes & Tangen a/s, Norway**
  tel. 02/55.16.16 - tx. 76058 marin n
- ◆ **Technomechanics, Greece**
  tel. 01/778703/2778718/8 - tx. 224860 tech gr
- ◆ **Zoepffel & Schneider Gmbh Fed. Rep. Germany**
  tel. 040/36.27.51 - tx. 215005 zugo d
- ◆ **Inter -Ocean Engineering, Hong Kong**
  tel. 05/299.7203 - tx. 65943 ioehk hx
- ◆ **Oy Telva AB, Finland**
  tel. 0/670.366 - tx. 123623 telva sf
- ◆ **Torkar Suahi Ltd, Turkey**
  tel. 1/151.46.13 - tx. 25907 atbbk tr
- ◆ **Blume Worldwide Services, U.S.A.**
  tel 914/721 6185 -tx. 4906585
- ◆ **I.M.S. Industrial and Marine Services SaS, Italy**
  tel 19/825 519 - tx. 271120 pp si i
- ◆ **Eberhardt Agencies & Shipping APS Denmark**
  tel. 33-1366-16 - fax 33-3213-14
- ◆ **Sun Marine Ltd, U.K.**
  tel 0252/620536 - tx. 858893 flatel g

- ✓ **Repropel, Portugal**
  tel 1/2750811 - tx. 12649 lisnav p
- ✓ **Hydrospace International, Dubai**
  tel. 04/370605 tx. 47455 hydro em
- ✓ **Semco Marine, Singapore**
  tel. 65/2650177 - tx. 21352 semsul
- ✓ **Soyuz Marine Service, California, USA**
  tel. 213/514.8504 - tx. 901276 mri us
- ✓ **Parker Diving Service**
  tel. 213/ 514.83.42 - tx. 901276 mri us

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HYDREX NEWS N° 22/93

No 22/october 1993
A quarterly publication edited by
Hydrex n.v.
Haven 29
Noorderlaan 9
B-2030 Antwerp

A newsletter for shipowners, their technical managers and superintendents on the economics of underwater ship maintenance

tel. ++ 32.3.233.53.51
fax. ++ 32.3.233.42.55

HYDREX N.V. – AN OVERVIEW

During his time at University Boud Van Rompay, the founder of Hydrex was introduced to cave diving and rapidly developed a life long love affair with the water. His diving activities rapidly let to an introduction to the world of commercial diving which was, at that time, in it's infancy.

During the oil crisis of the early seventies he recognized the need for an effective industrial solution for the cleaning of vessels afloat in order to save fuel. Few options existed at that time and, armed with the knowledge and viewpoints that he had gained working offshore, Boud Van Rompay formed Hydrex NV.
Hydrex started trading in 1974 and every year has seen the introduction of new innovations. Hydrex were the first to use inwater CCTV on the continent, a fender system was designed and built that allows the cleaning of the inboard side of vessels in port. Improved techniques for the safe blanking of seawater intake grids were introduced. Hydrex designed, perfected and built a cofferdam system that allows dry reparis to be completed to vessels afloat. Hydrex were the first to introduce inwater coded welding repairs. The equipment and methods for the inwater repair of propellers were invented by Hydrex, the list is endless.

" WE BELIEVE THAT HELPING OUR CLIENTS KEEP THEIR PROMISES IS WORTH WORKING FOR".

Since 1974 many changes and advancements have been seen within the diving industry in general, many of them instigated by the pioneering attitude of Hydrex. One thing, however, has not changed, the philosophy and prime policy of Hydrex has always been, and always will be *"We Always Deliver What We Promise"* and Hydrex promises quality, cost effective solutions for the maintenance and repair of vessels afloat.

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Celebrating 20 years of Hydrex and the magazine

In 1994 Hydrex celebrated its twentieth birthday. The magazine followed a year later. By then we had established ourselves as a world leader in underwater ship repair and maintenance services. Despite sending dive teams across the globe, we were never just a diving company.

This was once again clearly demonstrated by this article in the October 1994 issue of the magazine. In it we wrote about a very complex repair performed in Dunkirk. At that time, this was the biggest underwater welding operation of its kind that had ever been done.

October 1994

Hydrexnews

N° 26

A newsletter for shipowners, their technical managers and superintendents on the economics of underwater ship maintenance

editorial

contents

Hydrex repairs severely damaged bulbous bow of the Ademontasa

Experience

Excellent results

U.S. Department of Transportation

United States Coast Guard

Commander
U.S. Coast Guard Activities

2401 Hawkins Point Road
Baltimore, MD 21226-1791
Staff Symbol: C-5
Phone: 410-576-2661

16711

HYDREX International Underwater Contractors
Attn: Sonja De Bruyne
Haven 29
Noorderlaan 9
2030 Antwerpen
Belgium

Dear Ms. De Bruyne:

We have received your facsimile letter dated March 13, 1998 requesting some type of Coast Guard endorsement for the work recently done on the M/V IOLCOS PIONEER. As a regulatory agency within the international maritime community, we are not able to issue any recommendations concerning the merits of individual companies.

However, we do not hesitate to commend the approach and method used to insert the hull bottom plating. This expertise, combined with the knowledge, workmanship, and professionalism of the individuals performing the work, enabled the vessel to proceed to sea without going to dry dock for repairs.

If you have any questions, please feel free to contact Lieutenant John Nadeau of my staff at (410)-576-2661.

Sincerely,

F. L. SHELLEY
Commander, U.S. Coast Guard
Chief, Operations Prevention Division
By direction of the Captain of the Port

Over the years we have received many recommendation letters from shipowners, classification societies and even the U.S. Coast Guard. The one on this page was sent to us in 1998 after a complex welding repair on a bulk carrier in Baltimore.

No one believed the operation could be done afloat, but after its successful completion they were more than willing to admit they had been wrong.

Big operations, big articles at the end of the century

Inwater assistance to the Sea Launch Platform "Odyssey"

A photographic and CCTV survey on the 46,000-ton displacement launch platform - formerly one of the world's largest oil rigs - confirmed that two blades of the starboard side propeller showed damage. The tip of one of the blades was bent and had a small crack.

The damaged part was ground off and the propeller was balanced by cropping an equal part off the opposite blade as well. Another blade had suffered a 30mm crack and this was ground off too. Only 14 working hours after the job had started, our team returned to Antwerp.

On Sunday night five days later, Hydrex was contacted through its 24 hour service system by the representative of the ship manager, Barber Kvaerner Marine Management in Norway, to investigate the possibilities of afloat repairs on the bow thruster units, so as to avoid an unscheduled drydock.

Our engineering department drew up a proposition whereby surface technicians could perform the required repairs, this being the replacement of the seals. The proposal consisted of building 2 large cofferdams with an entrance shaft at the surface, allowing spare parts and personnel to enter the tunnel, thus creating a situation equal to drydock conditions.

The project was approved and Hydrex was ordered to perform the operations

On July 1st, a Hydrex underwater repair team went to Kristiansand, Norway to attend to the self-propelled, semi-submersible Sea Launch platform "Odyssey".

HYDREX Magazine

September '98

Inwater assistance to the Sea Launch Platform "Odyssey" Page 2-5

Fast intervention stops propeller from further causing damage Page 7

Hydrex Cargo Care intervention to pump chemical cargo ashore Page 7

Bulk carrier maintained operational after CCTV survey and fast rudder repairs Page 8

HYDREX Magazine

Number 72

Breaking new boundaries - solution to problems 4

Hull cleaning at Pitstop Portland 7

Bow thruster repairs from Holland to Germany 8

Crack repairs in Madeira 9

From Russia with love 13

Breaking new boundaries - solutions to problems

In Boston, USA, an 80 metre long container ship had an unfortunate run-in with some rocks and ended up with a large number of tears to her flat of bottom. They ranged from one to 7 metres in length with two of them at around 7 metres each.

Hydrex was called in to work on the problem and propose solutions for this major repair. Our technical team got together to assess the damage and the extent of repair work that would be needed and then worked out ways and means that it could be done. Repair proposals and procedures were drawn up in order to obtain approvals from classification as well as coast guards.

These were sent on to the ship managers and whilst there was some trepidation about whether such work could be completed by anyone – they were finally convinced that Hydrex could do the job.

This of course created a major problem for the ship owner. What temporary solution could be provided that would allow the ship to get across the Atlantic safely to their home repair base in Antwerp where they wanted the permanent repairs to be done?

An 8 man-team was sent to start the work in liaison with a local company who provided backup, equipment and consumables. Just to challenge our team further, there were blizzards and freezing weather conditions.

The work required 5 different patches to be welded to the flat of bottom. The biggest one was 14.5 metres long by 1.3 metres wide and weighed around 2 tons. To get this one into position heavy-duty rigging equipment was necessary and a expert procedure needed to be worked out in order that the plate get them through customs in time and so our resourceful team worked out another means of attaching the plates to the ship – this time it was done by using a total of 170 screws dogs – an alternative procedure we have for a long time tested and utilized around the world.

To get all the plates securely attached it was estimated that a total of 2 kilometers of underwater weld seams were done by our divers – all of those on site were qualified and certified underwater welders. These welds were all above head welds as they were made on the flat of bottom.

The plates themselves, whilst flat on the outside, were designed with 2 concave surfaces on the inside meeting in the middle. This method meant that the inside of the plate would press against the damaged area and increase the surface contact and pressure with the flat of bottom, thus ensuring a better contact. Seals were of course placed all around the contact area and the empty space behind the plates were filled with concrete in order to stabilize it, prevent vibrations, create an additional seal and, in one case, to prevent the liquids in the fuel tank and the ballast tank mixing as the tear had ruptured the bulkhead between the two spaces.

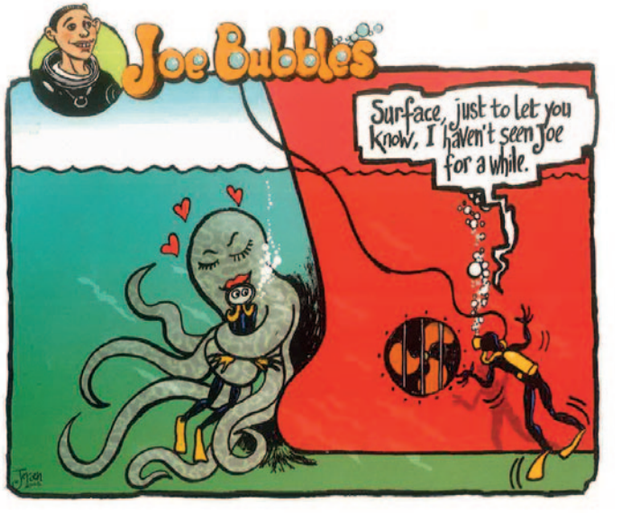
A growing company constantly looking for new opportunities

At the start of the new century Hydrex had grown too big for the existing warehouse. A state-of-the-art fast response center was constructed to allow us to keep providing our customers with the best possible service.

This new warehouse included a dedicated location for our R&D division. One of the new technologies developed here is our cold propeller blade straightening machine. First introduced in our magazine in 2001, this method has gone through many iterations since then and is still in use twenty years later.

Throughout the years there has also regularly been room for a less serious moment in our magazine, as is illustrated by this cartoon from 2002. By then the magazine had become a monthly publication.

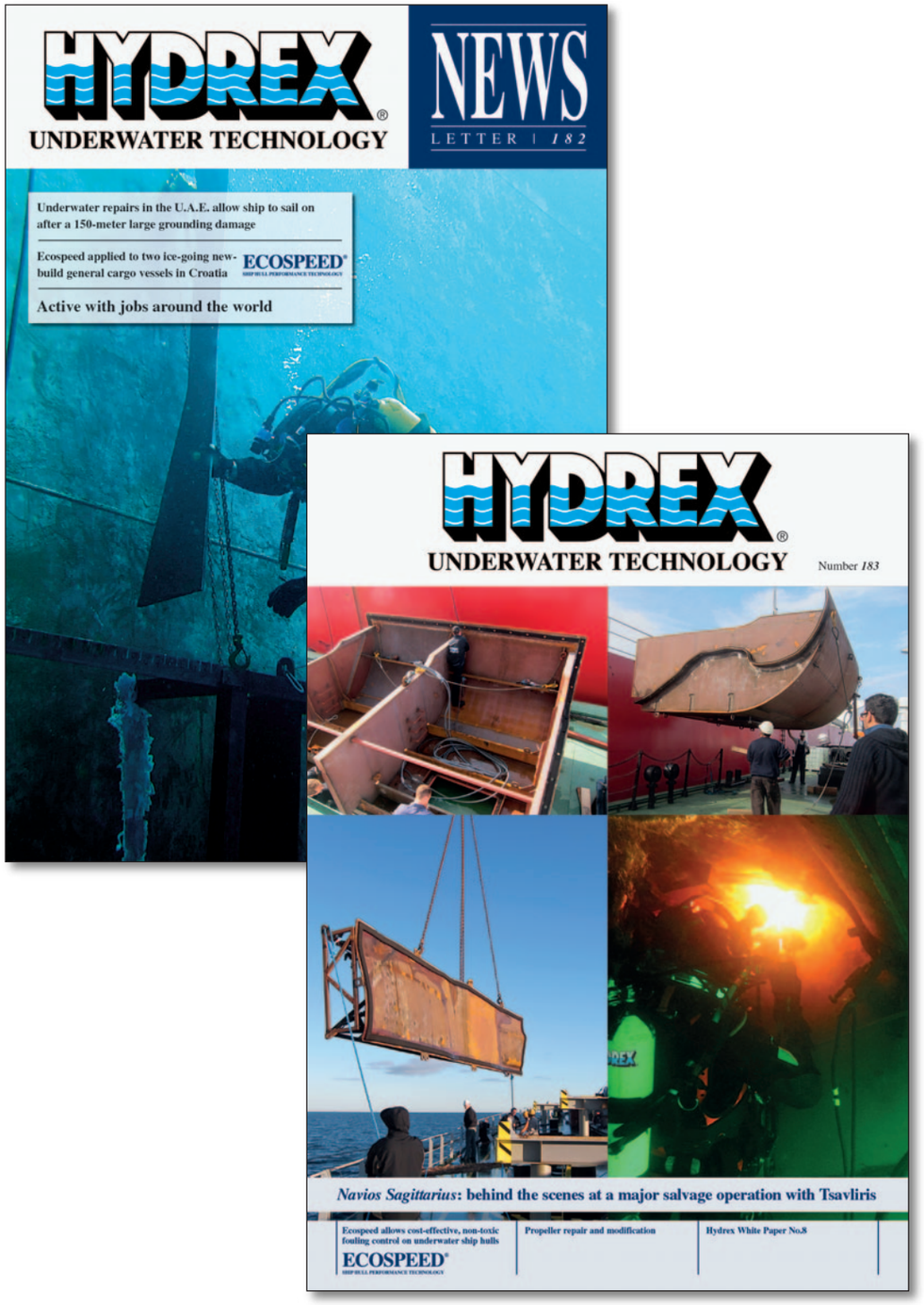

Our new fast response centre



Thruster repairs

Seal repairs

Complex steel repairs

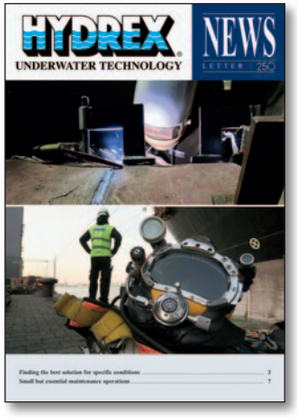


Writing about a wide range of operations

In the last twenty years the Hydrex magazine has arrived on our customers' desks every month. In this period we have written about many new technologies developed by our R&D department. Some have been tailor-made solutions for a specific problem, others are still used by our divers on a regular basis.

A very good example of this is our flexible mobdock used to replace stern tube seals underwater. Introduced in 2002, this technology has been used on hundreds of seal assemblies since then. The image of one of our divers working inside the mobdock (bottom right on previous page) is well known to regular readers of our magazine.

The two covers at the left of this page are both from 2011. Two tailor-made, complex hull repairs were carried out almost back-to-back. One of them was the replacement of an entire hull section – a feat never done before.



Writing about a wide range of operations

In 2018 we wrote an article about the history of underwater welding and the part Hydrex has played in this. We have been at the forefront of wet welding since 1974. In this period we have regularly introduced new welding techniques. We have also developed new equipment that makes it much easier to monitor and test the weld seams.

This has been done by our in-house R&D department who cooperate closely with our diving teams. Together they help us carry out the research required to keep evolving the available welding techniques.

This led to a new breakthrough in 2020 when we received a grade A wet welding certificate. The certificate was given for carrying out grade A groove welding underwater. Most companies with a wet welding certificate can only carry out fillet welds and this often only to grade B or C.

On to the next 300 magazines

It has been 46 years since the first Hydrex magazine was published, but 300 issues later it is still going strong. A lot has changed from the early days when it was a black and white leaflet until the fully fledged magazine it is today, but for us the goal is still the same: To inform our customers, the market and everyone involved in a neutral way on the latest technological advances.

The photographs are all taken with a digital camera now and the entire process of creating the magazine is done with a computer, but once the final approval has been given the magazine is still send to a printer.

It is always nice to see our magazine lying around when we visit customers, whether it is in Hamburg, Hong Kong, Tokyo or New York. It means that it is being read all over the world.

We really hope you enjoyed this journey through the history of our magazine as much as we enjoyed going through the archives and putting it together.