

DIVENWS

042023

**IDSA ANNUAL
MEETING MAY 2023**

**DIVING STORIES
OF THE PAST**

**HANNAH DOUGLAS
COMMERCIAL DIVER**

**THE BADGE:
FINN HANSEN
DAG W. WROLDSEN**

**IDSA NEWS IS
LOOKING FOR
NEW ARTICLES!**



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Board

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Gouwakker 8
5321 WG Hedel, The Netherlands

Hon Secretary: Lars William Wroldsen
Norsk Yrkesdykkerskole, P B 23
1464 Fagerstrand, Norway

Member / Editor IDSA News:
Robbert de Bie
MacArtney Benelux B.V.
Buitendijk 31
3143 LV Maassluis, The Netherlands

Member: Dr. Hossam Elmasry
Middle East for Commercial Diving MECD
3, Iskandar Ibrahim St, Miami
Alexandria, Egypt

Secretariat NL: Carin Bot
Ambachtsweg 27
2641 KS Pijnacker, The Netherlands
T +31 (0)15251 2029

Chamber of Commerce Reg No:
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The Alan Bax Award honorable mention:

Alan Bax
Dag Wroldsen
Leo Lagarde



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FROM THE CHAIRMAN LEO LAGARDE

When this year went so quick, we have managed to do a lot of work, all Audits have been done so we are working on the new ones to come.

But first of all, Jill Williams, sadly passed away, we wish Alan and the whole family all the best in coping with their grief. and in our minds, we are there and as chairman I also have regular contact with Alan and will continue to do so.

Last year we have had the celebration of the IDSA his 40th anniversary, on which we have had a special moment with the Annual Meeting.

Our next Annual Meeting is in Bergen, Norway on 8-11th May. Our host (HVL) has set up an interested program for this meeting and we hope that you all will be there and have more points for the meeting.

Joining the IDSA Annual Meeting is a tool of our mission. Our mission is and stays to improve the diving quality and diving safety worldwide. To communicate, network and exchange knowledge is essential for our aim.

We are working on the divers handbook and supervisor course, and we continue our work in order to approve and extend our standards and training.

We would need all the help and support from all our members in order we can spread out the word of IDSA more. We also need your support with articles for our IDSA news, so let your student, instructor, or the school introduces themselves in order to have more the story behind the training and the IDSA.

We achieved last year that we have now more than 2100 followers on Instagram. This and the IDSA news are good tools to promote your school. So sent us more training pictures etc to post and publish.

When you need the support of the board or have questions and ideas that can help the IDSA please let us know so we can work on this together.

Hope to meet you in person in Bergen.

Your Chairman,
Leo Lagarde



IN MEMORIAM JILL WILLIAMS

Jill Williams was the Director of the Health Education Unit at King's College, University of London, for ten years, developing courses which met both high academic and professional standards, before moving to Fort Bovisand Underwater Centre where she was Admin Manager until its sale to new owners in 1996. She was the External

Evaluator for the HSE in its development of the Central Examination System. She has a strong interest in Diver Training and Safety and has been associated with IDSA since 1990 since which time she has attended almost all Annual Meetings firstly as an observer and then as Minutes Secretary. She also acts has been secretary to the Executive Board and was joint editor of IDSA News.

We thank Jill for all her work for the IDSA and wishes Alan and her family all the deepest sympathy and unwavering support. Wishing you peace, comfort, courage, and a lot of love at this time of sorrow. Our hearts go out to you at this difficult time.

FROM THE EDITOR ROBBERT DE BIE



In this fifth edition of the new version of IDSA news, our goal of having a magazine for the members by the members is becoming more of a reality, and this is exactly what we want.

We see more stories but please write about your school, challenges you are facing. When you have had an audit from IDSA or another organisation please write an article for IDSA news on this.

For all of us this magazine is not only to promote our organization but also YOUR school. So also, for your instructors please write your article on your important job.

Being the editor of IDSA news is a very challenging and satisfying responsibility. After all, our readers rely on IDSA news to fulfil their needs regarding topics which they bring to the table.

We have some standard items, topics in our magazine, such as;

Medical issues
The Badge
Historical Diving
The Student, if we get **your** articles!

Finely we trust that you can identify yourselves in these topics and that this will encourage you to take part in the next edition of the magazine, therefore we ask you to send us articles regarding your schools, education and from the divers who followed the trainings.

WE are looking for **HELP** to make each time a new IDSA news this take a lot of time and effort with finding advertisements and stories, so please sent me an e-mail if you want to be a co-editor of IDSA news!

So, if you have interest to help out with IDSA news, please sent an e-mail to info@idsaworldwide.org.

Enjoy reading the IDSA News and Safe Diving Training.

YOUR AD IN IDSA NEWS!

IDSA news is looking for advertisers, so if you want to advertise, please let us know, the costs for advertising are:

The Magazine is A4 format printed in 4 colors offset litho.

Whole page bleed area: 285mm x 198mm €325

Half page: 146mm x 198mm €225

Quarter page: 146mm x 99mm €175

All digital photographs and artwork to be supplied at 300dpi.

DISCOUNTS

1. A discount of 25% is available to all IDSA Members.
2. A discount of 10% is available to all non IDSA Members who place more than one advertisement paid for in advance.

If you have any interest, please sent your e-mail to post@idsaworldwide.org or robbertdebie@gmail.com



STUDY CENTRE CE DI FO.P.

The IDSA (International Diving Schools Association) auditors returned to the Netherlands: the controls of the Cedifop management systems at the port of Palermo concluded.

PALERMO (November 19, 2022) – Once all the controls on the management systems were completed at Cedifop, the two IDSA (International Diving Schools Association) officials Leo Lagarde (from the left in the photo) and Wim Gerrits returned to Pijnacker-Nootdorp in the Netherlands.

Having completed the administrative checks carried out on the first day of their arrival in Palermo, in the premises of Cedifop at the Sammuzzo pier, the two officials, accompanied by the director of Cedifop, Manos Kouvakis, by the teacher Francesco Costantino, with the collaborators and students of the 2 ° free course for “Technical Underwater Operator”, they moved to the spaces of Fincantieri, to the Palermo Naval Shipyard. In the waters in front of the entrance to the port, under the watchful eyes of the two IDSA officials, the students alternated in dives

where they performed some simulated procedures with repair work foreseen by the teaching in order to obtain, at the end of the course, the qualification OTS professional. The course, in fact, is valid for enrollment in the Divers Register at a Port Authority, on the national territory and allows you to continue the certification with the “Inshore” and “Offshore” levels and relative enrollment in the Telematic Repertoire of Italian Commercial Divers (valid within the EU), at the Department of Labor of the Sicilian Region.



Cedifop is the only school in Italy which, in addition to courses for Technical Underwater Operators, also organizes those valid for enrollment in the “repertoire” (register) of “Italian commercial divers” (valid within the European Union) with the same courses that currently, with IDSA standards, are made in Norway and Denmark.



Apox B.V. is specialist for all medical solutions for divers and diving companies. We are located in the Netherlands and export to all countries in the world. You will find our medical cases from Vietnam to Brazil and Norway to South Africa. All items are certified by a Medical Doctor specialized in diving medicine, qualification B. Apox is a pharmacy department, all medicines are available. Apox is a GMP certified company for filling medical oxygen cylinders.



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THE BADGE

How did you get involved with diving? What are your ambitions? What annoys you the most? In The Badge we talk to people from the Professional diving world and find out who they really are and what drives them. In this month's issue we meet Finn Hansen who is the Head of department in the HVL Diver Education in Norway.



How did you get involved with the Professional diving world? **01** I did my commercial training back in 1977 during my time in the Norwegian Navy. At that time the duration of diver education was just 8 weeks I started as an inshore diver in 1979. In 1982 I finished the bell diver course. Apart from a few shorter assignments as a bell diver, I have mostly worked as an inshore diver, with tasks such as construction, salvage, etc. In 2002, I started as a diving instructor at the diving school in Bergen, where I

was able to continue my education in pedagogy. In 2014, I took over as head of department for the diving school and have been there until today.

Who did you learn the most from?

During my long career in diving, there are many people who have meant a lot for my learning. Both managers and colleagues within the diving industry and at the diving school have meant a lot to my own development. Without such cooperation, I would not be able

to gain new skills. I would also like to mention that working with students has been a good experience and acquired extra knowledge.

What are your drives and ambitions?

I have worked in the diving industry since 1979, and I have seen both safe and unsafe diving. As head of the Diving Training in Bergen, I wish to contribute to create a good and safe education, so that our students will be skilled and safe divers after graduation.

The best reward you can have as a teacher is to see students succeed in their future profession.

What annoys you the most?

Clients and diving companies that do not take safety seriously, and thereby risk the divers' health.

What is your life motto?

As a teacher, it is important to be a good role model for the students. An

old Chinese saying goes "I hear what you say, but I see what you do."

04

05

AS A TEACHER IT IS IMPORTANT TO BE A GOOD ROLE MODEL FOR THE STUDENTS

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THE MACARTNEY GROUP



The MacArtney Group is a worldwide organization of operations specializing in the sale and service of underwater technology products and systems. The group headquarters in Esbjerg, Denmark, established in 1978, support independent operations in the USA including Canada and South America, the Asia Pacific including China and Australia, the UK, Norway, France, Germany, Benelux and Italy.

Each operation meets the local requirements of the region with full support from the Danish-based parent company, MacArtney A/S. MacArtney A/S co-ordinates product development, system integration, training, quality assurance, financial support and marketing for all operations.

Underwater technology covers a highly diverse market including offshore oil and gas geophysical exploration, development and production, various military activities including MCM, civil engineering, underwater security, ocean sciences, environmental studies and research, nuclear plant inspection and leisure activities.

Company policy is to deliver tried and tested technical solutions to the problems encountered in this harsh working environment. An established and certified ISO 9001: 2015 quality assurance program, established in 1993, regulates MacArtney.

MacArtney Benelux BV, established in 1998, represents a developing commitment by the MacArtney Underwater Technology Group to fully support the challenging markets in the Netherlands and Belgium.

To meet market demands for a full support service facility, MacArtney Benelux BV introduced a workshop in the spring of 2002.

In 2022 we moved to our new modern facilities, conveniently located in Maassluis, MacArtney Benelux BV houses an experienced sales staff as well as a trained technical and administrative staff.

Products & services

Apart from the broad range of underwater technology products for the subsea and offshore markets, the company specializes in products for fishery, deep sea mining, light and camera systems, inspecting, Moulding, installing cables/connectors on



board/ location, developing dedicated Moulding processes to assembly complete electrical systems including PCBs, sensors, and connectors. We also develop a special PU material for customer applications, where each individual material will have a special set of required properties making it the unique solution for its intended use.

MacArtney Benelux BV provides a 24-hour service - giving support and service of all our products. We also carry an extensive stock of standard Subconn® connectors, cameras, and light for immediate delivery.

Product & Services portfolio

- Cable Moulding & encapsulation workshop
- Electrical & optical connectors (f.e. Subconn, Trustlink, Optolink, Gisma and others)
- Cables & terminations
- Fibre optic terminations
- Umbilical terminations
- Winch & handling systems
- Electrical & optical slip rings
- Luxus Cameras & lights
- Luxus wired and wireless video systems
- Sonar systems & acoustics
- Multiplexer & control systems
- Engineering & services
- ROV & ROTV systems
- Product development & system integration



The MacArtney Underwater Technology Group has carried out extensive product development projects resulting in new industry standard products for the offshore industry.

This development encompasses the non-metallic and micro series of Subconn® connectors and OptoLink connectors to the NEXUS fibre optic telemetry system.

Not least, development includes the successful FOCUS towed steerable instrumentation platform for the survey industry and most recently the TRIAXUS, also a towed instrumentation platform designed for high-speed oceanographic work. All developments are carried out in close collaboration with the customer.

Our engineering department is also capable of supplying tailor made systems and system integration according to customer specifications within all areas of mechanical, electrical, and optical design for the underwater industry.

System integration tasks range from subsea cable systems to the complex ROTV systems as well as complete instrumentation package delivery and installation on research vessels.



JOEL WONG: A PROFESSIONAL DIVER EXPLAINS

In what year were you trained as a professional diver?
January 2021.

Where did you receive your diving training?
MECD. Alexandria, Egypt.

How did you experience the time of your training?
Excited to learn something new together with people from different countries around the world.

What is your technical background before starting the training?
Bachelor Degree in Civil Engineering, major in Sustainable Development.

What did you have to do in the field of further education / safety training to practice your profession?
I feel scared and panic on my first dive right after graduate from diving school because of the low visibility (<0.3m) in muddy water.

After that, I blindfolded myself and walked around my house to build up my confidence and sense of direction without seeing anything.

Are you employed by a diving company or are you self-employed?
Employed by a subsea construction company.

How did you find your way into the job market in the beginning?
Sending a CV to the diving company all around the Southeast Asia country, asking around my diving friends.

Have you underestimated things? The difficulty in job employment.
The job opportunities for commercial divers are getting lesser due to the advanced technology of the ROV.



Have you overestimated things?
The salary of a commercial diver. Due to the advance technology, the demand for commercial diver is getting lower and the salary for commercial diver also getting lower.

Where do you work now diving? company / region / international / work field civil underwater construction, shipping, ports, SAT)?
International. Offshore of Egypt, Qatar, Saudi Arabia, UAE, Malaysia.

What is your specialty within the specialty of the diving company?
Inspection diver.

What does your day look like in the workplace?
Inspection diver for several diving companies and diving teams.

How did you see your profession develop or foresee future developments in terms of innovation, knowledge transfer, rules about safe diving, etc. (Do you see differences in the workplace since you started and now)?
As I mentioned before, with the advance of ROV technology, most of the risky jobs have been replaced by the ROV. In some jobs, the ROV also monitors the safety of a commercial diver while the diver is working.

Have you mapped out your future - are there still challenges?
Yes, technology is getting more advanced., divers need to continuously improve their technical knowledge, such as electrical and mechanical.

If you had the choice now to become a professional diver - with the knowledge of today - what would you do?
Go ahead and give it a try, professional diver is a unique job, you can experience something special, something that ordinary people do not have.



How do you see the labor market developing?
Although the labor market seems like decreasing, but no worries, as long as divers continuously improve their knowledge, they will never become jobless.

How important is it to be able to work in a team where the dive supervisor is in charge, but you as a diver are also expected to think along about diving safety and the technical aspect of the assignment?
Safety is always the first priority. The first person responsible for the diver's safety is the diver himself; the second is the diving supervisor.
Good communication with the team and supervisor is a must while dealing with the safety and assignment.

What would you like to advise future divers?
Safety first and be professional!



DIGITAL DIVE SYSTEM

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LOOKING TO IMPROVE YOUR DIVE-PROJECTS?

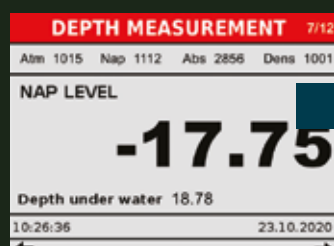
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Angle measurement

IDSA NEWS IS LOOKING FOR NEW ARTICLES

Dear Members, we need your help in articles for IDSA news, because IDSA news is for and from the members.

We have some standard articles in IDSA news such as:

The Badge for which we have some standard questions, and we will invite you for this.

But we have also an article about the Commercial Diver 2023 explain, SO please ask one of your old students to write for this and please see below the standard questions.

The Commercial diver in 2023 explains:

- In what year were you trained as a professional diver?
- Where did you receive your diving training?
- How did you experience the time of your training?
- What is your technical background before starting the training?
- What did you have to do in the field of further education / safety training to practice your profession?
- How did you experience the time after your training eg. finding the right employer?
- Are you employed by a diving company or are you self-employed?
- How did you find your way into the job market in the beginning?
- Have you underestimated things?

- Have you overestimated things?
- Where do you work now; diving company / region / international / work field civil underwater construction, shipping, ports, SAT)?
- What is your specialty within the specialty of the diving company?
- What does your day look like in the workplace?
- How did you see your profession develop or foresee future developments in terms of innovation, knowledge transfer, rules about safe diving, etc. (Do you see differences in the workplace since you started and now)?
- Have you mapped out your future - are there still challenges?
- If you had the choice now to become a professional diver - with the knowledge of today - what would you do?
- How do you see the labor market developing?
- How important is it to be able to work in a team where the dive supervisor is in charge, but you as a diver are also expected to think along about diving safety and the technical aspect of the assignment?
- What would you like to advise future divers?

Do also notice that there is a possibility to promote your school by a article of your school and training complete with pictures, so please use these possibilities.

IDSA ANNUAL MEETING 2023

9-11 MAY BERGEN, NORWAY

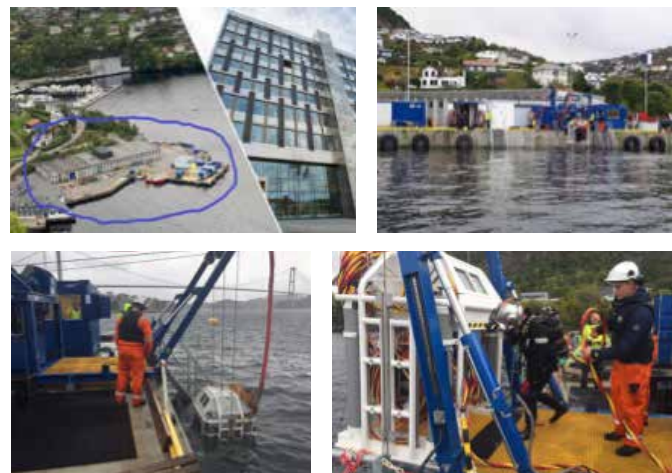


We do hope to see all the members in Bergen this year for our annual meeting. The annual meeting will run on the 9th to the 11th of May with a reception at the hotel Monday 8th of May.

Our host for the meeting is Western Norway University of Applied Sciences, Diver Education, Bergen Norway. The Diver Education is a full member of IDSA since 2017.



The Norwegian diver school (Norwegian: Statens dykkerskole) was a public diving school for professional divers located in Gravdal, Bergen, Norway. Established in 1980, it was merged and became part of Bergen University College (now part of the Western Norway University of Applied Sciences) in 2005. The diving school is a part of the Faculty of Engineering and Science, and is located in Skålevik, approximately 15 kilometers from Bergen city centre.



The location of the school is in Bergen.

Bergen City is the second largest town in Norway.

The city is an international center for aquaculture, shipping, the offshore petroleum industry and subsea technology, and a national centre for higher education, media, tourism and finance. Bergen Port is Norway's busiest in terms of both freight and passengers, with over 300 cruise ship calls a year bringing nearly a half a million passengers to Bergen.

Direct flights to Bergen Airport are available from several hubs throughout Europe. From the airport to the hotel the taxi drive will take approximately 20 minutes. Public transport will take one hour.



Accommodation and meetings will take place at the Hotel Scandic Bergen City.

We hope to meet you all during our Annual Meeting!

Please do notice that we are looking for a host for our annual meeting in 2024, so please let the board know who would like to organize the Annual Meeting.

TRAINING CENTER FOR COMMERCIAL DIVERS IN PANAMA: PRO DIVERS

Raising the standards of security

Our Training Program places special emphasis on activity-related security which must be considered in Diving Operations for which we comply with National laws and international regulations. Understanding that the levels of compromise and responsibility fall on each individual and teamwork.



Our course

Our course is aimed at all that person who wants to venture into the profession of Commercial Diving, where we focus on providing Theoretical/Practical training that guarantees a highly technical workforce trained and prepared for field activities, the course will be divided into three levels.

Levels

A1: Basic theoretical/practical course, where students will develop improvements in their physical conditions to achieve the minimum required to train commercial divers, develop your adaptation to diving systems with equipment autonomous and achieve the development of skills set for this level.

A2: Advanced theoretical/practical course, where the levels of demand will be increased in both areas achieving significant increases in knowledge, trust, security, and necessary aspects to become a commercial diver.

A3: Theoretical/practical course, focused on the development of diving activities with surface supplied air system where applicants will participate in a process of adaptation, and develop operational management skills, we highlight, underwater welding/cutting operations with refloating balloons, installation, and armed structures.



Commercial Diving activities represent a source of employment in countries with the seaside.

Our Facilities

We currently have all the equipment necessary for the Training of Commercial divers.

- Pool
- Practice Tank
- Hyperbaric chamber
- Boats
- Classrooms

Our center has the necessary infrastructure that guarantees the development of the educational processes.



Upcoming Courses

In our growth and expansion plan, we will include specialty courses to increase our student's knowledge and bring new technologies and highly educated professionals into the job field:

- ROV Operator
- Underwater welding
- Hyperbaric Chamber Operator
- Ultrasound Measurements Level I and II
- Underwater Cutting with Electric Arc and Oxygen

MEDICAL ISSUE FOR SAFE DIVING

By Dr Hossam A. El-Masry - CEO Middle East for Commercial Diving MECD



Hyperthermia & Hypothermia

The human body temperature is fairly with average consistent at around 37°C irrespective of his surroundings. The body maintains a balance between heat production and heat loss. If there was no heat loss the heat produced by the body's metabolic processes would raise the body temperature by about 1° every hour.

How do we gain heat?

- The body's metabolic processes,
- Through the external environment (if the temperature is higher than the body),
- From hot foods and liquids,
- Shivering (a reflex initiated to produce heat).

How do we lose heat?

- Through the skin (Conduction, Convection, Radiation, Evaporation)
- Through respiration.

Temperature regulation takes place within the hypothalamus (in the brain). Heat loss is controlled by means of vasodilatation of the skin's vascular system and by sweating. Heat gain is controlled by restriction of blood flow to the skin vascular system & Shivering.



Hyperthermia means increased (hyper) temperature (thermia)

- Degrees of hyperthermia
- Heat cramps (An injury that affects the muscles)
- Heat exhaustion (Can affect anyone working in a hot/humid environment)
- Heat stroke (A life-threatening condition in which the body is overwhelmed by heat and its cooling mechanisms stop functioning)

First Aid

- Move the victim to a cool place & settle them in a comfortable position.
- Loosen tight clothing & remove any sweat-soaked clothing with permission.
- Apply cool, wet cloths to neck, armpits, groin areas & fan the victim.
- Give the victim cool water to drink, unless nauseous or unconscious.
- Monitor the victim's condition.
- Call for more advanced help if necessary.



Hypothermia means decreased (hypo) temperature (thermia)

- Degrees of hypothermia:
- Chilling (Mild Hypothermia) when someone has been in cold water, stayed in wet clothing, ingested substances, such as alcohol, that interfere with the body's response to cold or a condition that impairs their circulation, such as cardiovascular disease or diabetes
- Clinical (Severe) Hypothermia can occur due to prolonged exposure to the cold
- Frostbite (freezing of a body area resulting in decreasing the blood flow to this area & ice crystals form under the skin, severity depends on temperature, length of exposure, and wind strength.

First Aid

- Move the victim to a warmer environment
- Replace wet clothing with dry clothing & wrap the victim in blankets, coats, or any available insulator
- Give the victim warm liquids to drink if they are conscious
- Do not try to warm the victim too quickly, it can cause heart problems as still-cool blood in the extremities is shunted to the trunk of the body
- Monitor the victim's condition.
- Call for more advanced help if necessary.



ROV pilot technician is one of well-respected and highly paid careers in the offshore.

Training can help you to advance your career in the world of deep-sea piloting.

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- ✓ Fiber Optics.
- ✓ High Voltage Electricity
- ✓ ROV Familiarisation

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MIDDLE EAST
FOR COMMERCIAL DIVING





De Zeeman PRO introduces DAR1210

The DAR1210 has been developed due to the high demand in the industry for a certified & reliable a high specification reducer for use during diving operations. The DAR1210 has a flow of 1100 Liter per minute at 10 bar and an optimal designed outer body in order to meet this requirement. This without any compromise towards safety or reliability.



Ordering info:

DAR1210:	DZP High flow reducer with Approval (Without accessories)
DAR1210-JIC06:	DZP High flow reducer with Approval with following accessories: HP & LP pressure gauge Safety valve WP: 5-20 bar Inlet: DIN200 or DIN 300 (To be specified upon order) Outlet: JIC06 1.100l/min, freeze-proof, incl. Certificate
DAR1210-LP006	DZP High flow reducer with Approval with following accessories: HP & LP pressure gauge Safety valve WP: 5-20 bar Inlet: DIN200 or DIN 300 (To be specified upon order) Outlet: WP LP006 Female 1.100l/min, freeze-proof, incl. Certificate
DAR1210-C747E:	Maintenance kit for DAR1210

Technical Specifications:

Flow: 1100 Liter per minute at 10 bar
Inlet pressure : 200 bar / 300 bar
Range outlet pressure: 5 – 20bar
Operating temperature: -20°C to +60°C

Design features:

- CE certified according to EN15333-1:2008
- Custom designed inlet DIN connection in ordered to be tightened by hand or tools
- Outlet port on side or the bottom of the reducer for optimal configuration
- Special body design to ascertain no freezing-up during operations



BELGIUM

info@dezeeman.be



FRANCE

info@dezeeman.fr



GERMANY

info@dezeeman.de



ITALY

info@dezeeman.it



SPAIN

info@dezeeman.es

LIFE AS AN INSTRUCTOR AT NYD

By Cem Durgun, wet bell and welding instructor

NYD Subsea Training Centre's mission is to produce safe, skilled and knowledgeable commercial divers. We as instructors are responsible for training students on how to perform a variety of underwater tasks.

I really like that NYD attracts students from all over the world who are seeking to gain the skills and knowledge needed to succeed in the commercial diving industry. The international environment is inspiring. My colleagues at NYD come from diverse backgrounds, with different nationalities and cultural experiences. Turkey, Egypt, Bosnia, Netherlands, New Zealand, Sweden and Norway are all represented among the school's instructors. This diversity brings a richness of perspectives and knowledge to the training program, which in my opinion is beneficial for students.

A typical day

We start every day at 8 am with a staff meeting led by the managing director and the chief instructor. Here we discuss the day ahead, review the schedule and the tasks for the day, and present and

discuss any non-conformances regarding safety, quality or technical from the previous day. The whole staff is present during these meetings, allowing everyone to stay coordinated and informed.

Once the morning meeting is over, we meet our students and brief them on the tasks of the day ahead, the safety protocols, and the equipment that they will be using. During the day students, learn with a hands-on approach, taking on all roles and responsibilities of a working dive team.

At the end of the day, I do a thorough debrief with the students, and do maintenance of the dive station to ensure everything is ready for the next day.

Each instructor has a dive station in which he is in charge. The stations are different from one another, and the students rotate through all the stations in groups of 8 students each. My station is currently the wet bell where I teach the students welding and burning in addition to the wet bell procedures.

I am in charge at my station, and it is my job to keep the station operational, tidy and maintained, and to update and improve any study materials the students use.

Safety is of utmost importance at NYD. The school maintain all necessary certifications and regularly gives instructors additional training to stay up to date. Regular emergency preparedness



exercises keep me confident that I can handle any situation that might occur.

Having worked at NYD for 15 years I have learned a lot and met many interesting people from all over the world. I love my job and think of NYD as my second family.



I LOVE MY JOB
AND THINK OF
NYD AS MY
SECOND FAMILY

KBA TRAINING CENTRE: CHALLENGES OF COMMERCIAL DIVING IN TODAY'S BUSINESS

Overcoming the "Blindsight" in Commercial Diving

Commercial Diving has been used in many offshore and inland / near shore work sites from construction works at shallow depths at ports, harbours, ship husbandry to work at extreme water depths in the offshore oil and gas / energy sector and salvage as a few areas of use. The key factors and considerations that must be maintained is the safety of the divers. To achieve this, requires many aspects for the diving contractor and client to implement. These include up-to-date diving / safety management systems, suitable operational procedures, risk management controls, trained and competent diving supervisors and divers and corporate policies. To implement such diving safety management systems, requires competent and experienced leadership and management personnel to oversee the jobs.

While large multinational corporations (MNCs) have their own corporate safety procedures, it is essential to incorporate and adhere to the requirements of any local national standards and/ or industry guidance for safe commercial diving operations. These include ensuring that the personnel are familiar with the national standards and industry guidance, have suitable and adequate training, experience, competence, and have diving equipment that are in-date and maintained to manufacturer and industry requirements. Complications arise when such standards are not implemented or complied with during the project planning phase especially when assumptions are made that a diver or diving supervisor with any form of certification is able to do the job.

This 'blindsight' happens when national diving standards and guidance are not followed. These national standards are established after lengthy consultation with subject matter experts (SMEs) to develop Code of Practices and commercial diving training standards as control mechanisms to ensure safety protocols are followed by trained and competent personnel. While there are many health and safety standards, regulations, and codes of practices in various industries, Commercial Diving Regulations and standards are in place only in some countries such as the United Kingdom, Norway, Singapore, Australia, New Zealand, USA and various European countries as examples. These countries have means to implement training standards, commercial diving equipment and project requirements and have systems in place for prosecuting companies and individuals when the standards are not followed causing injury or a fatality.

A serious concern shared are the statistics of commercial diving fatalities while conducting ship husbandry / inshore, near shore operations. Other major factors resulting in injury or fatalities at work for divers included the use of Self-Contained Breathing Apparatus (SCUBA), and the lack of suitable training and competence of divers.

Over the years, many individuals have lost their lives while at work 'commercial diving'. While there are many reasons for each incident, the common factors of each involved the following:- No formal training; poor/inadequate supervision; not assessing or understanding the hazards involved; poor risk assessments; incorrect use of diving equipment (use of recreational self-contained breathing apparatus (SCUBA); inadequate or no emergency planning in place; no hyperbaric support for decompression illness; failure to use suitable control systems such as 'lockout – tagout' when working on pressure differentials and ship husbandry.

With suitable commercial diving standards and legislation in place and robust implementation of these requirements, along with a commercial diving training framework from diver to diving supervisor along with commitment for the personal development and competence of the workforce, such incidents can be avoided.

For more information, contact KBA Training at **+65 6542 4984** or marketing@kbassociates.org



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THE BADGE

How did you get involved with diving? What are your ambitions? What annoys you the most? In The Badge we talk to people from the Professional diving world and find out who they really are and what drives them. In this month's issue we meet Dag Wroldsen who is a professional diver in Norway.



How did you get involved with the Professional diving world?

01

I started as a recreational diver and bought my first scuba-set in 1971. I was 15 years old at the time. After finishing school, I gradually got more and more involved with commercial diving.

Who did you learn the most from?

02

My old boss Magne Vaagslid. He was the diving superintendent in Stolt Nielsen Diving. A great man who is still my good friend today.

What are your drives and ambitions?

The interest in diving and improving quality of diver training.

03

What annoys you the most?

Can't think of anything in particular.

04

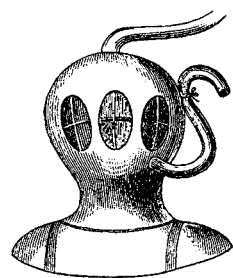
What is your life motto?

I don't have a specific motto, but I think it's important to continuously improve the diving methods. Believe in what you are doing and look forwards instead of backwards.

05



BELIEVE IN WHAT YOU ARE DOING AND LOOK FORWARDS INSTEAD OF BACKWARDS



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Holyhead, Anglesey, September 1959

DIVING STORIES OF THE PAST **TRAPPED UNDERWATER** BY REG VALLINTINE

TRAPPED UNDERWATER, he had to make a terrible decision.
Reg Vallintine talked to Norman Warren Owen and came away with
one man's remarkable story.

The isle of Anglesey in North Wales is home to a number of distinguished seafarers and divers, but none more distinguished than Norman Warren Owen DSM, a hero of the World War II Malta convoys and survivor of a horrific diving accident.

The story begins in August 1942 when the tiny island of Malta was desperate for supplies, being isolated and under daily bombardment by enemy aircraft. A vital relief convoy* was launched , protected by two battleships, four aircraft carriers, seven light cruisers and no less than twenty six destroyers. Even so, only five of the fourteen merchant ships that sailed through the Mediterranean finally got to the island.

Norman was a carpenter on the SS Deucalion and watched unbelievably as the aircraft carrier Eagle was struck by four torpedoes and sank within six minutes. He photographed the sinking never believing that his own ship would receive a direct hit just 24 hours later. He survived the subsequent attack but finished up on one of the Royal navy escorts, feeding shells to the guns. Battered down in the magazine while bombs rained down from above, Norman decided that this was probably worse than being on a civilian ship, so when the call went out for volunteers to help a stricken tanker, he was one of the first to go.

The tanker was the Ohio, which was destined to make the difference between survival and defeat for Malta. She had 11,000 tons of fuel and aviation spirit on board and, despite being a prime and extremely volatile target, had already survived one torpedo, the flames of a stricken tanker, collision with a dive-bomber and a burning Junkers 88. Before much longer she was set ablaze and considerably weakened by further bombing and torpedoes and was in danger of

WHEN THE CALL WENT OUT FOR VOLUNTEERS TO HELP A STRICKEN TANKER, HE WAS ONE OF THE FIRST TO GO

splitting in two. When her Captain and crew were taken off on two separate occasions to their amazement she did not sink, so when she was finally re-boarded it was to try and complete the most hazardous leg of the voyage.

No sooner had Norman and the other volunteers got aboard than she was hit by yet another bomb which destroyed her engine room and started another fire, although it missed the high octane cargo A Stuka dive bomber then knocked out her steering! The only way she could carry on was to be towed. This needed the combined effort of four vessels - a destroyer each side acting as splints, a third destroyer aft acting as a rudder and tug forward. As a trained shipwright, Norman's job was to try and stop more water getting in and also to restore the wire towlines which parted repeatedly. They tried to keep their minds off the ships list, the gaping rent in her hull and the fact that she was so low in the water that when going ahead, her main deck was awash!

Finally arriving just north of Valletta's Grand Harbour, she almost drifted into a minefield! At the last minute more tugs arrived and they entered harbour, where the oil was frantically pumped ashore. Shortly after the last drop had gone, she on the harbour bottom! Without the cargo it is doubtful whether

Malta would have survived because the fuel oil and kerosene forces based on the island to go back on the offensive. For their outstanding work and courage Norman and six others were awarded the Distinguished Service Medal from the King. Dudley Mason, as Captain of the Ohio, received the George Cross.

Five years after the end of the war, Norman was to make headlines again....

After the war he was working for the Blue Funnel Line in Birkenhead, when he got a message that the RNLI (Royal National Lifeboat Institution) were looking for experienced men to work on the construction of a slipway and lifeboat house. As this was back in his hometown of Holyhead on Anglesey, Norman jumped at the chance to avoid endless commuting. Once on the job he found that the team included a Cornish diver who was doing the underwater part of the work.

One Monday morning the diver did not appear and, as Norman had already tried out the helmeted diving gear unofficially, the supervising foreman asked him if he would like to help out until the diver came back to work again. He never did return!

It took Norman a couple of hours to work out the basic technique of diving using one of the two six-bolt Siebe helmets they had, after which he found that he had landed himself with a job that took fifteen months to complete. Mastering the suits had taken him a little longer, as they both leaked badly



Norman with the team who helped build the lifeboat house



Norman posing in his gear

around the corselette and slowly filled with water. When it was up to his knees, he had to surface to drain it out. One of the things he learned from others was that if his hands were freezing in winter, to push them into the mud on the bottom and leave them there for a couple of minutes to warm them up. He tried it and found it worked, as the mud retained some warmth.

His success with the RNLI resulted in British Rail offering him a job as their Holyhead maintenance diver. This involved working at the base of a lighthouse and also in the fearsome currents at Valley Cob, where the water rushed through a 7 to 8 knots and diving was only possible during a 15 to 20 minutes at dead low water. Several times Norman overstayed his time and got carried away, until his lifeline swung him back to the surface! He really enjoyed his diving, never guessing that his next job would end his career.

By July 1951 British Rail had decided to pull down a jetty that was no longer useful and their diver at that time had cut off the hardwood piles about three feet above the seabed. However, it now seemed that the remainder of the piles, driven some eighteen feet into the seabed, had also to be pulled out. They manoeuvred a one-hundred ton crane

into position and Norman disappeared with an axe and other tools to cut a groove in each pile then fix a wire rope around it, so that the crane could pull it out. They proceeded successfully until one day, when the wire rope. Norman went down and that the rope had twisted , leaving bight in the water. He held the pile with his right hand and caught hold of the bight to try and clear it. The next thing he knew, the fingers of his right hand had become trapped by the rope tightening around the pile.

His first problem was that he could not reach his exhaust valve, on the right hand side of the helmet, to adjust the air volume in his suit as enthusiastic pumping above was still filling it with air. The whole situation was rapidly getting out of control. Norman reached for his knife with his left hand. There was no chance of cutting the wire rope, so Norman began to saw through the trapped fingers of his right hand. Soon all he could see was blood billowing up! There was no sensation of pain, but he found that he could not get through the bone! He then thought of an alternative and made his usual signal for the crane to pull. The rope duly tightened but it only severed one finger, leaving Norman to continue tackling the bones of rest with his knife!

Suddenly he was free! He calmly collected his tools, surfaced slowly and passed them up to his tender, who was complaining of his late arrival back at the surface. Suddenly becoming aware of the blood, the tender turned white and had to sit down to recover! Others rowed Norman back ashore, helped him undress and he walked unaided to the hospital which was only five hundred yards away.

Norman sat in the waiting room. "What's wrong with you", they asked. "I've had an accident with my hand", said Norman.

It was twenty minutes before they came to attend to him, during which time Norman recounts that the pain had increased tremendously! After it was over the doctors recommended that he give diving a miss. In all, his diving career had lasted twelve months!

A year later he was awarded the Daily Herald newspaper's 'Order of Industrial Heroism' known as 'the worker's VC', for his outstanding courage and coolness.

At 85 Norman still leads an active life, sail racing every weekend. His sons have both taken to the sea. David is a Captain on the cruise line Saga Rose and a keen diver, while Edward is an Olympic yachtsman.



Reg Vallintine with Norman in 2001

(An account of Norman Warden Owen's wartime experiences was first published in Saga Magazine)

The Maltese celebrated the sixtieth anniversary of what they call the Santa Marija convoy of August 1942 in 2002 with a reconstruction in the Grand Harbour. Convoy survivors were all award honorary Maltese citizenship, including HDS Working Equipment Group stalwart Jim Hutchinson. By all accounts none of the newspapers, other media in Britain, or the British Government, took an interest.



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HANNAH DOUGLAS COMMERCIAL DIVER



Irish marine-science student Hannah Douglas was awarded the 2022 European Our World-Underwater Scholarship, one of three global scuba-diving awards funded each year by the watch brand Rolex. The Our World-Underwater Scholarship Society (OWUSS) was set up more than 50 years ago in the USA to develop the careers of talented young divers with a strong academic record and a passion for building a career in the industry. Three scholarships are awarded globally each year, one in the USA, one in Australasia, and one in Europe. Each individual spends a year on the road, diving and working with, and most importantly learning from and contributing to the work of leading divers, academics and conservationists around the world.

Hannah, 23, comes from County Wicklow on Ireland's east coast. She grew to love diving after leaving school and taking a PADI Open Water Diver course with

Ocean Divers in Dun Laoghaire. The entry-level training culminated in her first boat dive off Dalkey Island, swimming with seals through a kelp forest – an experience that convinced her that she should study marine science at the National University of Ireland, Galway. Continuing her diver training, and guided by kelp researcher Kathryn Scheonrock, Hannah went on to work on field-research projects as a NAUI Scientific Diver. Her final-year thesis focused on fireworks anemones (*Pachynerianthus multiplicatus*) on Ireland's west coast, working with citizen-science diving body Seasearch Ireland. Starting in June 2022, Hannah's scholarship has taken her across the world for training from New York, Indonesia, the Cayman Islands, Finland and even Antarctica.

Here she writes about her experience becoming a commercial diver at the BIM National Fisheries and Diving College in Castletownbere;

At the end of September, I finished my scientific diving training in Finland and headed back home to Ireland. I travelled to a small town in the far south of the country called Castletownbere in County Cork. It is a fishing port village, backed by beautiful mountains, facing onto the Atlantic Ocean, sheltered by the headland of the Beara Peninsula and Bere Island.

I had come here to take part in commercial diver training, this training is the first step that many divers take into the professional diving industry. It is a legal requirement in Ireland, the UK and many other countries around the world to have commercial diver training in order to be employed by someone to carry out any diving work such as engineering, construction or maintenance and in many cases this also includes scientific, media or even military diving. Essentially for anyone that is planning a career in the underwater world in a further capacity than the recreational or technical diving

industry, commercial diving training is pretty much essential. I was joined in Castletownbere at the BIM National Fisheries and Diving College by a group of equally enthusiastic candidates from various industries and diving backgrounds; engineers, fish farmers, construction workers or like myself planning a career in scientific diving. It was eye opening for me to meet people with such different motivations to train as commercial divers and draws to the sea.



We began on Monday morning bright and early in the classroom for diving briefings and dive theory. In our first few days we practised basic dive skills, getting everyone onto the same level and then cracked on with swim tests, full face mask training and rescue drills. The rescue drills began with assessing an unconscious buddy on the surface and carried through towing with rescue breaths, shore egress, shoreside scene management with CPR and O2 administration. Needless to say, we had our work cut out as we repeated the rescue scenario until each diver had polished the set of skills to demonstration level. It was rigorous but the progression of each diver during the course was incredible.

After a week of shore diving and training in various navigation and search and recovery training, we headed out to the 'Sandfisher' a purpose built barge, moored off Bere Island as the perfect training platform for the course. Out on the barge we had a high pressure



compressor for filling tanks after each dive, a surface supplied diving station and low pressure compressor, a hyperbaric recompression chamber, galley, head and mess. It was an ideal set up for the course and meant that as a team of students and instructors, we could run a full day of diving incredibly efficiently.



We began most mornings with classroom sessions covering everything from diving physics equations to rope splicing and equipment servicing. I found it fascinating to learn more about the world of commercial diving and also it was great to learn from instructors with such incredible depth of knowledge on each specialist topic. We were incredibly lucky that each topic covered on the course was taught to us by an expert in that field, meaning that any and all questions we had were answered in detail and often with real life analogy to bring the learning home.

After theory and dry skills, we would head out to the barge for our day's diving. Normally it would be two dives a day and when you weren't diving, you were the surface support of 'tender' to a diver's comms line, deck watch or fully dressed in and ready as a 'standby diver' able to hit the water at a moment's notice. We practised standby diver drills many times during the course, our diving supervisor made sure that the standby diver could hit the water with less than a minute of notice. It was fantastic to have the opportunity to train in what became a highly efficient and effective team during the course.

Towards the end of the course we were given various tasks as a group to complete for which we wrote up risk assessments and detailed project plans. Our projects varied from tasks such as close visual inspections of a subject to assess any damage or missing elements, for example a mooring line, anchor and chain or in one case a waste water outlet diffuser or 'pig'. During these assessments we used cameras, callipers and other measurement tools to get exact diameters of chains or bolts to look for any corrosive or gross structural damage. After each task, much like any other working commercial dive team, we wrote up survey reports.

We also were given more physical tasks such as cutting specific lengths of rebar that were communicated to us from the surface using an underwater workbench and hacksaw. These tasks were demanding but also I felt invigorated and enjoyed the challenge, it was a type of diving I had never before experienced. I am thrilled to have opened up a whole range of new skills. Installing fixed scientific experiments underwater will not seem such a daunting task to me anymore. We were taught comprehensively about the world of commercial diving and used the US Navy tables to plan theoretical dives and tasks to the second, taking into account the effects of pressure and workload on our diver's potential gas consumption. These decompression theory learnings were fixed concretely in our minds after our hyperbaric chamber training where we learnt how to carry out the internal and external pre-checks and how a recompression treatment is run from start to finish.

Also we got to experience our first ever chamber dives to 40m and the joys thereof. We were given to take into the chamber with us a balloon, polystyrene cup, neoprene hood, puzzles and a maths and phonetic alphabet test. It was incredible to see how compressed and

small the balloon, polystyrene and neoprene hood became.

By the end of the five week commercial diver course, we had covered everything from diving physics and physiology, the ins and outs of a commercial scuba set up and its repair to communication systems, working underwater, chartwork and hyperbaric chamber operations. It was an intensive and challenging few weeks but at the end we each had been given a wealth of knowledge and had grown as divers and as a team. I am so glad to have been trained by the calibre of diving instructors at BIM but also with the friendship and joy of working with a great team.



I am excited to continue in my career in marine science with the new skills that I have learnt in my commercial diver training. I feel more prepared for the challenges I will face and look forward, more confident with a heightened awareness of the safety, legislation and risk management required in the professional diving industry.



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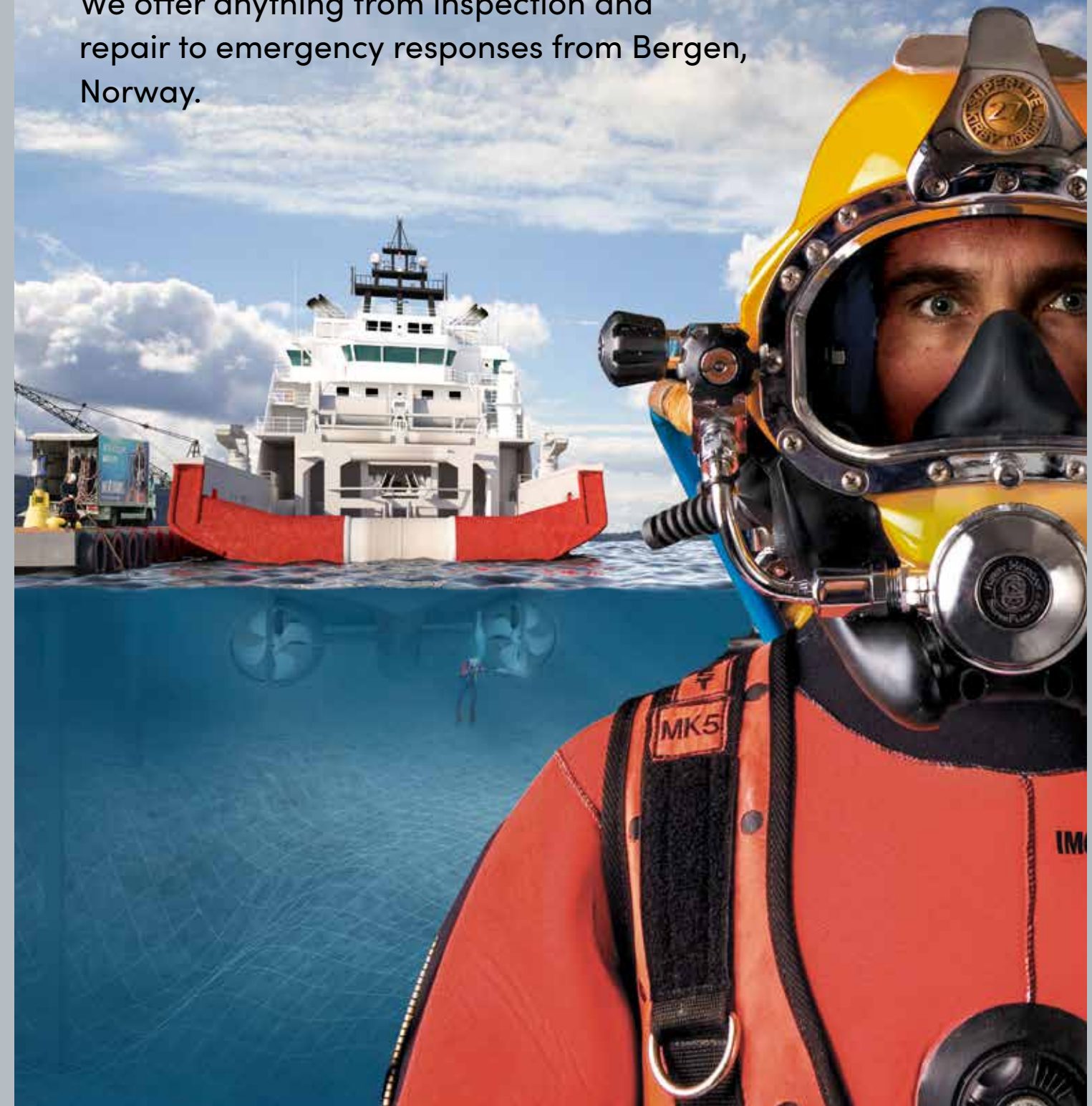
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