

IADC SAFETY AWARD 2016

INTRODUCTION

Dredging operations are risky and as such, the dredging industry pays a lot of attention to safety. It maintains a level of safety that can compete with offshore oil and gas sectors.

The International Association of Dredging Companies (IADC) is committed to promoting safety in the industry and established the Safety Committee that enables sharing of best practices amongst its members.

This year, IADC established the IADC Safety Award to encourage the development of safety skills on the job and to reward people and companies demonstrating diligence in safety awareness in the performance of their profession in the dredging industry.

Nominations for the IADC Safety Award 2016 were open till 31 May, 2016 and the Safety Committee received eight nominations. The Committee proposed the top three nominations to the IADC Board. The Board selected the winner. Nominations were assessed on five different categories – sustainability; level of impact on the industry; simplicity in use; effectiveness; and level of innovation.

Companies had to describe the level of sustainability and potential impact on the

dredging industry as well as the easiness of use. Innovation was an important element in the assessment and companies had to give detailed description of the innovative elements and the methodology or technique of their nomination. Furthermore, the potential benefits of the product, technology or safety technique for the dredging industry had to be described and how they could be implemented.

The IADC Safety Award 2016 was picked up by DEME for its “Enhanced muster station” (see page 24). The award was presented by Peter de Ridder, president of IADC to Lieven Durt, director of QHSE-S DEME and Luc Vandenbulcke, managing director of GeoSea. The Award was presented in September this year in Cascais, Portugal during IADC’s Annual General Meeting (AGM).

The Association is currently accepting submissions for the IADC Safety Award 2017. The registration deadline is 31 May, 2017. The Safety Award is open to IADC members

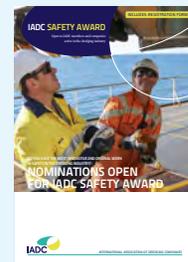
Above: Safety is priority in the dredging industry. The IADC Safety Award was established to encourage the development of safety skills on the job and to reward people and companies demonstrating diligence in safety awareness.

and other companies active in the dredging industry.

The Safety Award will be presented by IADC’s Board of Directors during the Association’s AGM.

IADC SAFETY AWARD 2017 REGISTRATION

Companies need to fill a pdf registration form.



It is divided in four parts:

1. Registration form;
2. Description of nomination;
3. Description of innovation;
4. Description of potential use.

Companies can send their registration forms, videos and images to info@iadc-dredging.com. Videos and photos should be sent via WeTransfer.

SAFETY AWARD NOMINATIONS

ENHANCED MUSTER STATION, DEME (WINNER OF IADC SAFETY AWARD 2016)

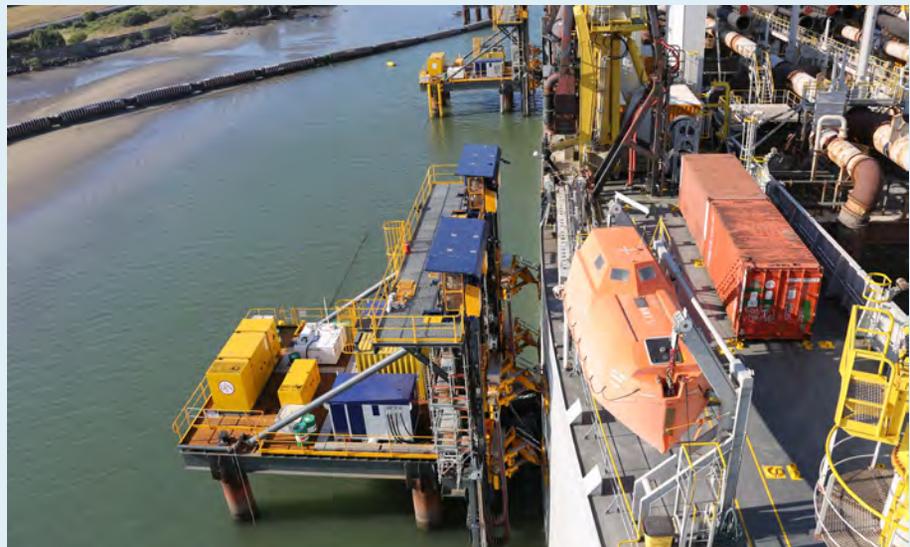
The muster station on board of the jack-up vessel *Neptune* was enhanced by painting numbered circles on deck. It is efficient during drills and emergency situations and it helps provide the following: a quick overview of the number of people gathered at the muster station, the number of missing people and a way to identify those who are missing. This enhanced muster station can be applicable to all dredging vessels and can be implemented at low cost (only a paint job) and minimum effort. (Read more about the winning nomination on page 28)



Top left and right images show the muster station before painting numbered circles on deck. The bottom two images show the muster station after it has been enhanced.

FULLY AUTOMATED TSHD MOORING, JAN DE NUL AUSTRALIA

During the dredging and reclamation works of Brisbane Airport Corporation, JDN Australia installed a Cavotec Moormaster system for a safe mooring operation. The MoorMaster is a fully automated mooring system, using large vacuum pads, installed on rails, with a holding force of 20 tonnes per pad, creating a fast and secure connection between the temporary mooring facility and the vessel. This automated system was able to hold TSHD *Charles Darwin* in position alongside berthing dolphins during discharging process without the use of any mooring ropes. Advantages of this system include: the improvement of personnel safety and injuries during mooring reduced to nil; ship's crew can become more efficient and maintain uninterrupted rest hours; and movements on deck are reduced.



The fully automated Cavotec Moormaster system held TSHD *Charles Darwin* in position alongside berthing dolphins during discharging process without the use of any mooring ropes.

SAFETY AWARD NOMINATIONS

SAY YES TO SAFETY, VAN OORD

Van Oord's new safety programme, "Say YES to Safety" was started in January 2016. Van Oord will expand the programme within its organisation and outside of it in the coming years. It is a sustainable safety programme and is designed to encourage accountability for safety behaviour, leadership and commitment. It not only focuses on safe working practices, but also very strongly on leadership and commitment throughout the company processes. Some of the innovative features of the programme include practical measures to safeguard the people on site in their day-to-day work, new and appealing design that inspires everyone to say "YES" and a focus on personal commitment and behaviour for all people working for and on behalf of Van Oord.



"Say YES to Safety" poster highlights life saving rules.

USING TECHNOLOGY TO DRIVE SAFETY CULTURE, J.F. BRENNAN

J.F. Brennan is enhancing its safety culture through the use of technology in the workplace. It implemented a system called HCSS mobile safety and also integrated it with its "Heavy Job" and "Heavy Bid" safety apps. The apps allow the company to collect and review all safety documents from anywhere across the country as well as easily share information and reports from the field with clients. Field supervisors can access the safety apps through their iPads and can generate safety meetings from over 800 preloaded topics, enter near misses and safety observations. Supervisors can also access employee training and certifications. The apps are user-friendly and are efficient for leaders in the field due to quick access to relevant information.



J.F. Brennan field supervisors can access the safety apps through their iPads. Image on the right hand corner shows that the apps are user-friendly and efficient.

SAFETY AWARD NOMINATIONS

NINA WORKBOX SERIES, ROYAL BOSKALIS WESTMINSTER NV

NINA (No injuries, No accidents) is a safety philosophy whereby Royal Boskalis Westminster works on a sustainable development of its safety culture, by structure (vision, values and rules) and time (over multiple years). To contribute more towards safety ownership within the company's operational teams, the "Workbox Series" was developed together with in-field representatives. It is an interactive platform, seeking a dialogue with the participants in a way to raise self-awareness. It includes training by representatives from peer groups, collective learning in small teams and self-learning at own work location. Currently, two different Workboxes have been developed: "Hands" and "Mooring". The third one still being developed will cover the subject "Feet" (slip, trip and fall).

PROPAGATING WHAT IT IS YOU STAND FOR
JOHAN BAKKER, CAPTAIN OF THE CYRUS
 Johan participated in the workbook pilot on board the Cyrus.

"The workbook is a nice complement to other toolboxes, because it specifically focuses on something that you normally would not discuss: your hands, and the risks of injury. A three-hour workbook seems long, but the interplay and interactivity prevent it from feeling long. A fun part of the sessions is visiting various work places in groups to see whether you can identify unsafe situations. In that way, you apply what you have learned: by looking at the work location from a different perspective. We brought people to places where they normally wouldn't go. For example, the cook was taken to the ladder the underwater portion with the cutting head. In that way, people learn to better understand each other and that strengthens the team spirit.

As a management team, you have to propagate what it is you stand for. We brought the ship to a halt for the workbook, and Louis Dekker, our Project Manager in Porto Açu, participated in the training as well. That makes an impression."

KEEP YOUR TOUCH!

FROM SKEPTICAL TO MOTIVATED
SHARIF SPEKER, CAPTAIN OF THE SEAWAY
 Sharif participated in the workbook pilot on board the Seaway.

"We held the workbook with people from all disciplines. Some were a little skeptical at first ("great, more training..."), but I noticed that they came out of it very motivated. That was the result of how the workbook is structured: you listen to information, watch a film clip, actively engage with the material, and take time for reflection. And it was a topic that concerns everyone. The fact that the presentation was given by two people also worked well: one person presents the material while the other person assists the participants. I therefore believe that the workbook is a tool that we must certainly continue to use. After using these tools for a short time, these techniques become routine; this is a good way to "teach" yourself.

I would love it if we could establish a databank of workboxes that you can draw from as needed. If you are in Qatar, a workbook about how to deal with heat. During a project with a large amount of berthing and unberthing, a workbook about hands. If you do that, you are training in a truly focused way, and that works."

INTERACTIVITY
BOB CREEMANS, CAPTAIN OF THE TALOUS II
 Bob participated in the workbook pilot on board the Talous II.

"Nearly a third of all accidents involve hands. For that reason, I think that it is meaningful to devote specific attention to that issue: after all, we only have two of them. We held the workbook together with employees from the Coastway and the Phoenix. I find the interactivity to be particularly good: when we took a tour of the ship, we ran into someone who was not wearing the proper gloves while welding. He was talked to about that, so that has an immediate effect. I think that the workbook could offer even more if it were brought even closer to people. Let the guys discuss it among themselves first and then have them discuss their findings with a manager.

What the workbook offers is raising awareness, the understanding that PPE is important, and that holding each other to account makes a real contribution to a safer working environment. As captain, I want to set the right example in this respect."

SAFE BODY: HANDS

THE NINA WORKBOX SERIES

THE FIRST WORKBOX

AVAILABLE NOW

SAFE BODY: HANDS

HOW TO PREVENT HAND INJURIES

SAFE HAND **GOOD BEHAVIOUR** **GOOD HOUSEKEEPING** **SAFE USE OF TOOLS** **WEAR APPROPRIATE PPE** **SAFE GUIDING**

The NINA "Hands Workbox Series" brochure.

OVERALL SAFETY FEATURES ON CUTTER DREDGER BIESBOSCH, ROYAL IHC

Royal IHC has developed several safety features on a standard cutter suction dredger. The majority showcase common safety features but there are a few that are innovative for this type of dredger. The innovative features consist of a "Cutter platform", "Spud Guard system" and "Spud Sherlock system". The cutter platform improves accessibility around the cutterhead and is not common for this kind of dredger. The "Spud Guard system" indicates overload of the spud to the dredgemaster. The "Spud Sherlock system" prevents the spud being hoisted out of its guide construction (that the spud is not hoisted too far). Other safety features on the dredger include personal life-saving equipment, Search and Rescue Transponders, and additional access platforms.



Royal IHC developed various innovative safety features on a CSD; Biesbosch features a cutter platform that improves accessibility around the cutterhead.

SAFETY AWARD NOMINATIONS

RECLAMATION FOR PASIR PANJANG TERMINAL PHASES 3 AND 4, PENTA-OCEAN CONSTRUCTION

The reclamation of Pasir Panjang Terminal Phases 3 and 4, a container port project in Singapore was nominated for several safety features. The first aspect is the “geo-bund” temporary edge structure for land reclamation. They provided notable safety benefits for the adjacent dredging work and construction of a caisson quay wall. The second aspect was the dredging and rock blasting works for deepening the ship turning basin between the new reclamation and the existing container terminal berths. These operations were carried out while normal terminal operations continued for a protracted period, without any incident affecting the terminal operations. The third was the installation of an all-weather steel gantry tower for slipforming work to construct the walls of the mega box caissons for the quay wall.



The reclamation works for Pasir Panjang Terminal Phases 3 and 4 was nominated for its various safety aspects.

LIGHT WEIGHT CUTTER MAINTENANCE PLATFORM, VAN OORD AND DAMEN

Van Oord and Damen Dredging Equipment have developed a new light weight cutter maintenance platform for their CSD650s *Ural River* and *Mangystau*. This platform provides a safe working environment for replacing cutter teeth and performing other maintenance jobs on the cutter head. The platform is supported by the cutter ladder and this increases the platform’s stability, reduces relative motion and allows for further weight reduction. Safe access is now provided via the cutter ladder. It is not possible to access the platform during dredging when the cutter ladder is down. The platform walkway is also installed only on starboard to further reduce weight. The platform is relatively easy to install on small and medium CSDs; it is low cost and easy to transport in one container.



The light weight cutter platform ensures employees can work safely while replacing cutter teeth and conducting maintenance.