



SAFETY MATTERS



Three-monthly newsletter from **Royal Boskalis Westminster nv**

Volume 9 | number 3 | December 2010

In this issue:



Page 1-4

NINA on board

Page 5

This time in...



Page 6

Presentation of the 2009 Boskalis Safety Award

Colophon

AND HERE ANOTHER HINGED GUARDRAIL FOR COLLEAGUES WHO NEGLECT NINA



NINA on board



Edax

Since the kick-off in July, all parts of the company have gradually become familiar with the new safety program NINA. So how will NINA affect the fleet? Safety Matters gauged reaction.

Imagine you have worked on a cutter, hopper or backhoe for years. You have to work hard to keep up the pace and productivity is key. Then the entire crew is told to stop working so you can discuss safety together. How does the crew react? "I hope this sends a clear signal that Boskalis wants to take safety awareness a step further", says Frans Oosterwijk, Team E Plant Manager (backhoes). "Safety is more important than productivity".

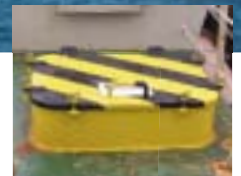
"We're going pro in the major league of safety."

Rinus de Vos, Edax Chief Engineer

For example, work on the Manu Pekka was recently interrupted to teach both day-time and night-time crews about NINA. During a start-up meeting, a senior manager explained the NINA values and rules and then went on to describe the program's practical implications. Frans Oosterwijk relates, "I asked crew members about their involvement in any accidents and near accidents and how these incidents could have been avoided. Did they apply the NINA values? Is there room for improvement?"



Removable bollard guardrail



New hatches on deck

Taking the necessary steps to improve on-the-job safety and reduce risks to an acceptable level can lead to dilemmas: what one person considers acceptable, the other may find questionable. "That's why you have to discuss these issues with each other. I try to stress the importance of a solutions-based attitude. Sometimes we are too quick to think that there is no other (i.e. safer) way of working for various reasons, for one because things have been done that way for years. However, in the sessions, the crew were very inventive in coming up with extra precautionary measures to improve on-the-job safety after all. Success depends



Hinged guardrails

on the willingness to think the situation through as a *group* and to take everyone's ideas seriously."

"We are all equal when it comes to safety."

Frans Oosterwijk, Team E Plant Manager

An open atmosphere

Frans Oosterwijk heard a wide variety of opinions at the start-up meetings. The crews of some vessels are very communicative, while



Cage around spud carrier ladder

because I show them how important NINA is for me. How can I expect them to observe the NINA rules and values, if I don't?"

The major league

Both of them feel positive about NINA. "To me, getting Peter Berdowski to sign the NINA rules and values was the most important part", says Rinus de Vos. "That way you know you don't have to be afraid of reprisals if you report something about safety. You know your decision has the management's full support. So now we can rid ourselves, once and for all, of that old-fashioned nonsense of always demanding more and more and never stopping. We're far from finished, though, because we're now going

pro in the major league of safety. We have the tools and the resources. Now all we have to do is apply them. But I've noticed it becoming part of the culture. When they say to me, 'you and your NINA again', I think to myself, 'hey, you know about NINA! We've gotten through at last!'"

According to Piet Spruijt, "Communication is actually the most important part of safety. NINA promotes communication, both in the toolbox meetings, and on the job. We pay a lot more attention to safety."



others keep more to themselves. Sometimes this has to do with differing ethnic backgrounds or the hierarchy on board the vessel. "Some vessels have a more open atmosphere than others. When crews speak more openly with each other, they also seem to discuss safety more easily. We can see these differences which mean that we have to approach each vessel differently. But in the end, the message is the same: we are all equal when it comes to safety. Everyone is entitled to voice his opinion and we all deserve to be taken seriously."

"Not everything can be set down in rules. NINA is about logical reasoning."

Stef Loffeld, Team D Maintenance Engineer

"As a master, it's important to me that everyone keeps an eye on his own - and his colleagues'- safety", says Piet Spruijt, Master on the *Manu Pekka*. "Hopefully the NINA program will help." And this is precisely why the captain and chief engineer must set an example, adds Rinus de Vos, Chief Engineer on the cutter *Edax*. "The guys in the engine room follow my lead,

Drip tray around Winel tank vent



Protective safeguards around winches



Protective safeguards around deck winches



Risk assessment

One important part of NINA is the risk assessment where the risks of various activities are reviewed. Recently, Boskalis began implementing risk assessments on board, as well. According to Rick Maliepaard, Team C Plant Manager and Safety Program project team member, "It's one of the key instruments to encourage discussions about safety. The implementation of on-board risk assessments led to intensive discussions with captains and chief engineers lasting several days."

The risk assessment includes a safety matrix, with three danger levels (red, yellow and green) based on an accident's probability on the one



Extra step added in the engine room

hand and its impact, on the other. The goal of the risk assessment is to get as many activities/parts as possible into the green zone (in other words, the safe zone). In some cases, that means making technical changes, clarifying instructions using stickers, or adapting the working method. More planning

and discussion are required. However, it doesn't have to stifle the creativity that made Boskalis great. "If something unexpected happens, you have to act first and talk later", asserts Piet Spruijt, Manu Pekka Master. "If there's an oil spill, I can't go and fill out a risk analysis first. However, you can all talk about it afterwards and decide whether it was managed effectively and what could have been handled better, so you learn for the next time."

Taking stock

In the meantime, all vessels are subjected to risk assessments. With the help of the captain and chief engineer, Erik Stuij carried out the risk assessment on the backhoe Maricavor. "Everything here was in pretty good condition, though one thing that was missing was the escape hatch in the crew's quarters. It's the type of thing that people have known for years, but now something will actually be done about it." Everything on the Manu Pekka was also in good order, according to Master Piet Spruijt. "One thing we'll do is install an alarm that sounds when the door to the winch room opens. Those kinds of things increase safety precisely because our crew is so small (only two at night)."

The Edax was a different story. According to Chief Engineer Rinus de Vos, safety on this cutter was at a level considered acceptable in 1985. "I used to work on the Taurus, a vessel that was deployed in Khalifa, for example. The safety precautions on the Taurus were strict, because the client had high safety standards. The Edax is a little smaller and is deployed on

smaller projects with lower safety standards. That's something you notice on these vessels. We've made improvements all over, from the kitchen to the staircases, adding everything from anti-slip flooring to grates to screen off rotating machine parts."

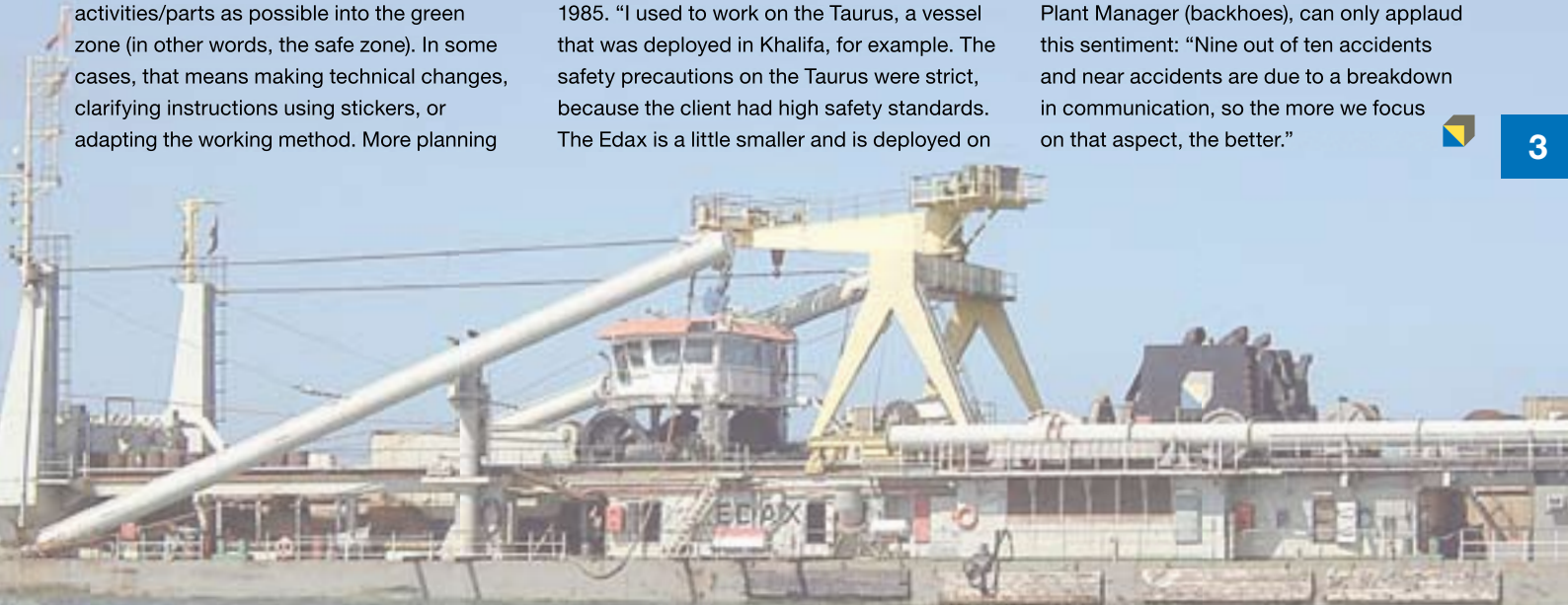
Logical reasoning

The risk assessment is also all about logical reasoning. According to Stef Loffeld, "NINA is about common sense, about using your own judgment, which is quite easy when you realize you would like to return home at the end of the day with all ten fingers and toes. Viewed from that perspective, you know how to work safely, even if it isn't set down in rules."

"The technical standard helps you get a handle on the requirements for the vessel."

Erik Stuij, Plant Engineer

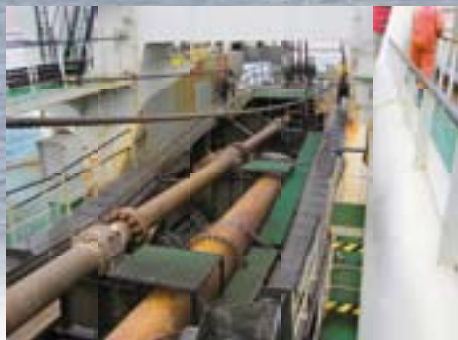
Refueling is a good example. Erik Stuij relates, "The rules tell you to maintain good lines of communication. But what good is that if someone on board answers 'Nightshift' when you ask him his name? That's why we added that we only want to work with people who speak good English." Frans Oosterwijk, Team E Plant Manager (backhoes), can only applaud this sentiment: "Nine out of ten accidents and near accidents are due to a breakdown in communication, so the more we focus on that aspect, the better."



Guardrails and steps on cutter ladder

Walkways and guardrails on cutter ladder

Safety walkway on deck



Technical standard

Last July, Boskalis introduced its own technical standard for vessel parts. “The standard was devised to reduce the number of common accidents, like tripping, falling and slipping”, explains Rick Maliepaard, who helped develop the standard. “The standard also prescribes a minimum level of equipment on jetties and crew boats, to enable safer embarkation and transfers.”

“A standard way of doing things is very difficult for us to deal with, because creativity is our bread and butter”, says Dick Stander, Material Development Project Engineer. Stef Loffeld, Team D Maintenance Engineer (large cutters)

adds, “That’s the approach that got us where we are now”. That fact that this standard has still been introduced now says a great deal about the current development of safety procedures at Boskalis. Plant Engineer Erik Stuij thinks Boskalis will benefit enormously, “because a technical standard clarifies the requirements for everyone, across the entire company. The standard also helps the crew get a handle on the requirements for the vessel.” As well as reducing the need for discussion, that clarity paves the way for changes – and the necessary investments.

New: Safedesign@boskalis.nl

At times, project managers face the dilemma of a crew boat or jetty which does not meet the technical standard. Fortunately, the website safedesign@boskalis.nl was created to provide quick, effective assistance so they can implement the standard more easily.

Holes and gaps in the engine room floor filled and levelled off



Safeguard system



Safeguard system for Bolnes engine



Protective safeguards in the engine room



“The days of throwing together your own little jetty are definitely over.”

Dick Stander, Material Development Project Engineer

Project managers can check the site to order a safe jetty design or carry out minor modifications on board, for example. The safe design site is manned by Material Development Project Engineer Dick Stander. “The days of throwing together your own little jetty are definitely over. Each jetty must be tailored to the project’s local conditions. For example, I had a jetty designed for Angola. They send me the information I need, so I have a clear picture of the requirements. Then I commission an external engineering firm to do the job. Next, I receive a drawing with the technical specifications, which I send off so they can build or buy the jetty locally.”

“We pay a lot more attention to safety.”

Piet Spruijt, Manu Pekka Master

Eventually, there will be a whole library of different jetty designs, which can be adapted to local requirements. That means that the safe design site will be able to respond more quickly to questions, which is critical because the planning is the most complex part, not the safe jetty itself.

This time in...

Brighton, U.K.



Nordic Giant

In Brighton, Westminster Dredging is involved in a large-scale project to build a new sewage system, including a state-of-the-art pumping station on the cliffs and an outfall pipe for the cleaned sewage water deep below the surface on the seabed.

In Brighton each working day begins with a Start-of-Shift (SOS) meeting at 7.15 a.m. “That’s a contractual obligation,” explains Project Manager André van der Wiel, “but it works so well that I’m going to continue doing it in the future. The great advantage is that we get to meet briefly every day and run through the day’s activities, focusing on safety and the risks involved unit-by-unit and as staff members. If the Manu Pekka and the Strekker crews can’t work offshore because of bad weather, they join the meeting as well. This way everyone is well informed. But it’s not just that; the social aspect is important too. You get to know each other better, which builds trust and that’s crucial where safety is concerned.”

Top 100

Westminster Dredging is in Brighton digging the trench for the pipeline that will be installed in collaboration with JV partner Land & Marine. Once the pipe is in place, the dredged material will be put back in the trench to cover the pipe. The client is the contractor Costain. “We’re the only dredging company in Costain’s list of the top 100 possible contractors,” explains André. “The level of safety is the main criterion for getting on the list. We are audited on a regular basis and in our last audit we even achieved one of the highest possible scores. Thanks to NINA, safety awareness is only getting better and better. The ‘stand down for safety’ implemented by Costain fits in perfectly with the NINA focus on everyone’s conduct in the work place.”

Excellent saleswoman

Tonnie Moerland is Dredge Master on the Manu Pekka. “Communication can be difficult in a multicultural environment. When Frans Oosterwijk (Plant Manager) and Arjan Visser (Plant Engineer) were here to introduce NINA we shut down the unit as agreed with the project management. That made an impression and the two gentlemen were able to get a

discussion going about safety. I was surprised, because a lot of Finns are usually reluctant to tell the boss what they think.” The project’s SHE-Q coordinator is the Finn Eutu Pajala, who nods in agreement when he hears Tonnie’s comments. “NINA is an excellent saleswoman - she can sell the safety concept to anyone. The point is that we all have the tools at our disposal, but not everyone uses them. Especially the most important one, which is your brain. I am convinced that NINA will bring about real change in the company.”

SHOC!

In September, Business Unit Manager Hans Dieteren visited the Brighton project to discuss NINA. “I think this commitment from senior management has been an excellent boost for



Almost-pipe-launch

safety awareness,” says André van der Wiel. “Being open and honest about working safely generates lots of positive energy, which is something that we noticed straight away from the large number of SHOC cards after Hans Dieteren’s visit! That’s why I hope that senior management continues these visits, and not only to discuss production, but also safety. That way the message gets through to everyone, from the top of the tree to the bottom.”





Bulldozer operator gives instruction in Khalifa

Presentation of the 2009 Boskalis Safety Award

On October 15, Group Director Peter van der Linde presented the Boskalis Safety Award for 2009 to Richard Sweeting and Mark de Bruijn for their idea to change the procedures at the reclamation area so that banksmen are no longer needed.

Do you have an idea that is practical and clearly improves safety?

If so, send it to safety@boskalis.nl and your idea will be entered in the competition to win the Safety Award 2010. The deadline for submissions is December 31, 2010.



Richard Sweeting and Mark de Bruijn receive the 2009 Safety Award from Peter van der Linde

In his capacity as SHE-Q Manager, Richard Sweeting conducted an audit in Bahrain following a serious accident that occurred at a reclamation area there a few years ago. "A banksman was killed in an accident. I was involved in the whole aftermath and it was really far-reaching." That experience was what motivated Sweeting to look for a different approach to working on reclamation areas. In Khalifa he met Superintendent Mark de Bruijn, who shared his opinions. "I had seen how we work on reclamation areas in the Netherlands. Together with Richard, I adapted that way of working to the situation in the Middle East."

In short, the role of the banksman - who uses flags to indicate how far a dumper can reverse - is taken over by the operator of the bulldozer who is already there anyway. The two operators maintain eye contact. As an extra safety precaution against reversing too far (risking reversing off the sand formation), each dumper leaves a load of sand at the edge of the formation to act as a sill.

"The two of you are being presented this award and the prize money for your idea which both increases safety and reduces costs, while still being essentially simple," said Peter van der Linde in handing over the award. "Such a change

to working methods requires everyone involved to adapt, which is why this idea fits in so well with the NINA approach of giving each other feedback. Together we can improve working conditions."

And they certainly have improved: there have been no more accidents since the implementation of this new working method. "If you move people out of danger, they can't get hurt," says Richard.

Richard Sweeting and Mark de Bruijn's idea won not one but three prizes: in addition to the Boskalis Safety Award, it also won the safety prize on the Khalifa site

and the safety award of the International Association of Dredging Companies (IADC).



Colophon

Safety Matters is the safety bulletin of Royal Boskalis Westminster nv in Papendrecht, the Netherlands

Safety Matters appears 4 times a year.

Text: Marecom, Breda
Design: Kreuger marketing-communicatie, Gouda
Printed by: De Eendracht, Schiedam
Impression: 5.000 exemplaren

Editing address:
Boskalis Safety Matters
P.O. Box 43
3350 AA Papendrecht
The Netherlands
Tel.: +31 (0)78 - 696 90 11
E-mail: safety@boskalis.nl