OFFSHORE ENERGY



SAFETY MENTALITY LEADS TO INNOVATION

Boskalis has developed a multi-functional cleaning robot as a safe and sustainable alternative for the underwater maintenance of the loading and unloading installations of Dow Benelux BV.

Even today, thinking about safety tends to bring to mind rules, procedures and PPE. However, these aspects are not at all what safety is about. In cooperation with Dow Benelux, Boskalis Offshore Subsea Services has proven that the new safety mentality can create economic opportunities and innovation. Specially for the maintenance of the mooring and foundation piles of their loading and unloading installations, Boskalis has developed a patented, multifunctional cleaning and inspection robot. The robot has eliminated the need to manually hose down mooring and foundation piles, a job which is particularly dangerous. The new approach is also more effective and therefore more sustainable.

NOT A PAPER TIGER

Boskalis designed a cofferdam for the robot, which can also be used to safely give the piles a new coating of paint. Both applications extend the useful lifetime of the piles by over 30 years. Divers will still have to clean areas of the piles that are difficult to reach, because there are parts that the robot cannot get to. For this purpose, an implosion blaster was developed, which removes waste substances using innovative cavitation technology. This approach is safer for the divers because a much lower water pressure is used. According to Pieter Raes, Project Manager at Dow Benelux BV: "What appeals to me is that safety is not just a paper tiger for Boskalis; it lies at the core of the company's mentality. From there, new technologies are devised and applied in order to make the work intrinsically safer as well as more efficient."



Cofferdam



Cleaning and inspection robot

LEARNING FROM SHOC TREND ANALYSIS

SHOC trend analysis BU Offshore Subsea Contracting gives insight in how people experience safety in their daily work.



Safety Bulletin Projects No 02

A SHOC card is meant to report hazards and suggestions for improvements. But what is the actual content of the SHOC cards raised and what do we learn from this? SHE-Q employee Ben Feenstra analyzed all SHOC cards raised in 2013 in the BU Offshore Subsea Contracting. He looked both at fallpipe vessels and other projects. The top 3 reported unsafe situations involve:

- fallpipe vessels: 1) improper sea fastening; 2) slips, trips and falls; 3) (risk of) falling from height;
- other projects: 1) falling from height; 2) collision with moving vehicle; 3) uncontrolled movement.

A positive development is that the number of SHOC cards raised for 'scope for improvement' was substantially higher in the second half year than in the first half year (152 against 64). The same goes for SHOCs raised with positive feedback (36 against 28).

IMPROVE SAFETY

A bulletin with the conclusions of the analysis was sent to all projects with a request to discuss the conclusions and the top-3 reported unsafe situations. Ben: "We will continue with these analyses in 2014 as it gives us an insight into how people experience safety in their daily work. This way we can learn how we can improve safety. And for the people raising these cards it is good to get some additional feedback."