

De-scaling at Satellite Platforms

New method for de-scaling of Xmas trees and process systems at satellite platforms using wave-compensating equipment from the deck of a service vessel.

Ocean Team Scandinavia A/S has many years of experience with de-scaling of Xmas trees and process systems at offshore production platforms. Systems at satellite platforms have the same need for cleaning as systems at the larger production platforms.

Unfortunately it is not possible to use the same procedure for de-scaling at satellite platforms due to the weight of the cleaning equipment. The equipment is simply too heavy for the cranes at the satellite platforms to lift. An alternative method for de-scaling at satellite platform is therefore needed.



Method developed for oil change and flushing at offshore wind turbines.

De-scaling Performed from Service Vessel

A solution to the above challenge could be to use a method developed for oil change and flushing at offshore wind turbines.

The idea is to perform the de-scaling from the deck of a service vessel. The de-scaling equipment is placed on the deck of the vessel and is connected to a wave-compensating 'hose reel'. Two hoses – one for clean chemicals and one for used chemicals – are lifted up to the satellite platform and connected to the system, which is to be cleaned.

The benefits of this method are:

- No heavy lifts of equipment are required.
- Known and well-tested equipment for de-scaling is used.
- Quick, safe and environmental friendly method.



Known and well-tested equipment for the de-scaling procedure is placed on a service vessel.

Safety Details

The service vessel and the platform are connected through one main hose – 'the sock' – which contains two separate hoses for clean and used chemicals. Further the main hose contains a wire of bearing steel to prevent the hoses from being torn apart due to the vessels movements in the sea.

Both hoses are equipped with a 'weak point' consisting of a patented valve system. If the pulling in the sock becomes uncontrollably strong, in case of over pull, the weak point of the hose will break immediately, and the hose will be separated from the platform in a controlled and safe way. Any possible physical damage or chemical spilling will hereby be minimized to the widest possible extent.

The hydraulic winch "Hose-reel" on the service vessel will automatically be compensating for the vessel's movements in the sea.



A wave-compensating Hose Reel is connecting the equipment at the service vessel with the platform.

