

OSI VOL. 7 ISSUE 4 | 2014

# Offshore

i n d u s t r y

GERMANY'S HELWIN BETA

Whole in One

COMPLETE PLATFORM T&I

*Gemini CEO Speaks Out*

A GIANT LEAP FOR DUTCH OFFSHORE WIND

**SUBSEA NORWAY**

LONGER, DEEPER, COLDER

# Deep Helder

SHIPYARD DE HOOP GETS VERSATILE

DEEP HELDER, LAUNCHED IN APRIL AT SHIPYARD DE HOOP'S SITE IN THE NORTH OF THE NETHERLANDS, HAS RECENTLY COMPLETED SEA TRIALS AND BEEN DELIVERED TO OWNERS SeaMar. The vessel's multi-functional capabilities are being put to use by DeepOcean, who have chartered the vessel for the coming 5 years. De Hoop CEO Patrick Janssens spoke to OSI's Ben Littler about the construction of a flexible OSV.

WORDS BY BEN LITTLER

Mr Janssens explained that, for a relatively small operation, Shipyard De Hoop is currently exceedingly busy. "Deep Helder is just one of several projects we are involved with currently," he said, shortly after the launch of the vessel earlier this year. Amongst the other projects De Hoop were working on at the time was a PSV for Trinidad and Tobago, a transmix vessel for Nigeria, seven FSVs and no less than ten PSVs for ESNAAD-ADNOC, the Abu Dhabi National Oil Company. Shipyard De Hoop, in operation since 1889, are specialists in the production of high-end, technologically advanced vessels, constructed to the clients' very specific requirements. The company operates out of two shipyards, both of which are located in the north of the Netherlands.

## Traditions with a Modern Twist

Deep Helder's journey began in November last year with a keel laying ceremony held at De Hoop's yard in Foxhol, Groningen. The keel laying was attended by representatives of both SeaMar and DeepOcean. At the ceremony, yard Managing Director Leo Balkema carried out the traditional placing of the coin. The observation of tradition continued throughout the building process and emerged as a persistent theme when Deep Helder touched water for the first time to the sounds of a shanty choir singing old sailors' songs. This should not convey the image of a vessel stuck within the murky depths of some mythical maritime past,

however. On the contrary, as Mr Janssens explains, Deep Helder is at the cutting edge of offshore support. "Deep Helder is a multi-purpose vessel, able to fulfill a very wide range of offshore support duties, with cross-sector coverage. Not only that, she is designed to meet the strictest environmental requirements and has been built to the highest possible standards of comfort."

## Multi-Functional Flexibility

The multi-functionality required of Deep Helder was made abundantly clear by DeepOcean's General Manager, the Netherlands, Rick Green at the time the company entered into the charter agreement with SeaMar. Mr Green stated, "Deep Helder will be a cost effective vessel that we plan to operate on survey – geophysics, inspection and geotechnical – IMR and light-weight trenching, excavation and mattress installation projects for our customers in the oil and gas and renewable markets."

De Hoop have certainly equipped the vessel to achieve all these requirements. The DP2 Deep Helder is 64.8 x 15.77m with a draught of 4.5m and a considerable deck area of 500m<sup>2</sup>. She has been outfitted with survey and ROV systems, an offshore crane and no less than three moonpools. The De Hoop design provides suitability for platform maintenance, accommodation support, survey support, inspection, repair works, diving support and ROV operations. >>



Photo courtesy of Shipyard De Hoop



Photo courtesy of Shipyard De Hoop

### Sitting Comfortably

Deep Helder's main crane is from Lagendijk and offers a 20t @ 200m lifting capacity, active heave compensation and single fall 20m winch capability. The accommodation that Mr Janssens spoke of is designed to meet the full North Sea requirements of Comfort Class 1 notation. Cabins are provided, both single and double, for up to 50 persons, with full air-conditioning. Additionally the vessel has dayroom, messroom, galley, laundry and fitness facilities.

The environmental credentials of De Hoop's vessel design can be seen in the Deep Helder's clean ship, green passport and SPS2008 notations.

### Keeping Station

De Hoop fitted a Navis DP2 system to the Deep Helder's aft bridge. The control station is located at the forward navigational bridge. The system is capable of keeping position in beam seas with speeds up to 30 knots. De Hoop's design features a diesel electric propulsion system with four Caterpillar C32 main generator sets with individual outputs of 950kW, making for a total of 3,800kW. Veth Propulsion delivered the thrusters:

There are two Z-drive type VZ-900 thrusters, one type VL-400 L-drive thruster and a retractable Veth Tunnel Thruster type VT-700e.

### Getting to Work

In June, prior to De Hoop's delivery of the vessel, DeepOcean announced the award of a contract from Dong Energy, which represents Deep Helder's debut project. Starting this year, the vessel will be employed to carry out IMR and ROV inspection services on Dong's subsea assets in Danish and Norwegian territorial waters. The contract is fixed for a period of 2 years with options for extension after this. Mr Janssens summed up the project, saying, "This vessel makes us proud as it is a good example of a tailor made Dutch design, a high quality Dutch vessel built for a Dutch owner with a high level of operations. This combination assures a high earning power for our client. With this vessel we prove again to the world that Dutch yards can really compete internationally."

- i. [www.dehoop.net](http://www.dehoop.net)
- i. [www.seamar.nl](http://www.seamar.nl)
- i. [www.deepeacegroup.com](http://www.deepeacegroup.com)

### Feline Intelligence

DeepOcean selected Saab Seaeye's new Leopard ROV for Deep Helder. Saab claim that the Leopard, with its range of technically innovative features, is the world's most powerful ROV. Certainly its eleven thrusters, eight horizontal and three vertical, ensure steadiness in cross-currents. As DeepOcean's Rick Green says: "Environmentally we wanted an electric vehicle – yet one with work class performance. For our application the Leopard gives us the equivalent capability of a much larger hydraulic work class vehicle – and its thrusters mean it can handle strong currents – and that's important to us." The Leopard employs Saab Seaeye's iCON architecture. This distributes the intelligence throughout the vehicle via sensors and actuators as opposed to a more conventional, centrally located 'brain'. What this means, Saab say, is increased information to the operator, combined with greater space for interchangeable equipment and fast, easy maintenance access without the need for partial dismantling of the vehicle. The ROV will be permanently mobilised to Deep Helder.



Photo courtesy of Saab Seaeye

- i. [www.seaeye.com](http://www.seaeye.com)