





Anticipating the Future

On 15 July 2009 Jack-Up Barge celebrated a major milestone in the company's history as its newbuild jack-up platform JB-114 completed the installation of the first ever German offshore wind turbine. One day later, Offshore Industry met with Ronald Schukking and Maarten Hardon, Managing Director and Commercial Director of Jack-Up Barge, evaluating the project.

e are very proud of this extraordinary achievement", says Hardon. "On its maiden voyage the JB-114 installed the tower, turbine and rotor blades within 48 hours!" In May the Dutch company took delivery of two newbuilds, the JB-114 and the JB-115, which were both built at Drydocks World Nanindah (former Labroy Shipyards) in Batam, Indonesia. The two identical iack-ups were transported to Rotterdam on board the semi-submersible Dockwise vessel Swift where they went to the Keppel Verolme shipyard for their final outfitting. While the twin sisters were in Rotterdam, Jack-Up Barge organized an open house on the JB-115. Schukking: "The open house on 1 July was a fantastic event and a great opportunity for us to introduce our newbuilds to our clients, suppliers, subcontractors and our own personnel." The JB-114 was the first one to set off on her maiden voyage to Eemshaven, the Netherlands where she loaded the tower, turbine and rotorblades for the first German offshore wind turbine.

First Ever

The brand-new jack-up barge has been chartered by German company Prokon Nord Energiesysteme GmbH, who has been appointed to install six towers, turbines and rotor blades of the Alpha Ventus wind farm, located about 45 km North of the German island Borkum, in the North Sea. The Alpha Ventus wind farm is expected to be operational before the end of this year, making it the first offshore wind farm in German waters. The wind farm consists of six 5MW REpower turbines on a jacket foundation, and six 5MW Multibrid turbines installed on a tripod

foundation. Schukking: "The six wind turbines with the Multibrid turbines are to be installed by Prokon Nord, who has chartered our JB-114. For the installation of the slots and templates on the seabed, in preparation for the foundation jackets of the six remaining REpower turbines, contractor DOTI has chartered the JB-115 and in turn made it available for use by sub-contractor Nordwind." According to Schukking both jack-ups will remain active the offshore wind construction market when the Alpha Ventus project is completed.

Lego System

Jack-Up Barge Operations BV is one of the four companies of the Van Es Group. The other companies in the group are:

- ICE-PVE: manufactering, sales and rental of

Alpha Ventus

The Alpha Ventus offshore wind farm is a pioneer project undertaken jointly by EWE, E.ON and Vattenfall. The three companies have founded 'Deutsche Offshore Testfeldund Infrastruktur GmbH' (DOTI) for the construction of the wind farm. DOTI has leased the licensing rights from the 'Stiftung der Deutschen Wirtschaft für die Nutzung und Erforschung der Windenergie auf See' (Offshore Wind Energy Foundation) under the name Borkum West. Alpha Ventus consists of twelve 5MW offshore wind turbines, that are located in a water depth of about 30 m.

i. www.alpha-ventus.de







vibratory hammers and pile drivers

- PVE Cranes & Services BV: crawler cranes, piling and drilling rigs;
- World Wide Equipment: construction and marine equipment.

Jack-Up Barge was founded six years ago when The van Es Group was in the position to take over the marine assets of Ballast Nedam. Hardon: "These assets, such as small jack-ups and pontoons, were mainly utilized in the civil construction industry. During the past years we have replaced all the equipment and today our oldest jack-up dates back to 2004. Our core fleet consists of four modular jack-ups with a payload ranging from 200 to 400 t. Modular means that the platforms can be disassembled and fitted into containers, you can compare it with Lego bricks. This makes it very easy to transport them to wherever they are needed." These relatively small jack-ups are mainly used in the civil construction industry for projects in or close to port. "Just to mention some of these projects, the JB-108 is now in Peru working on a LNG terminal for Saipem. The JB-104 is used for the piling operation for a new container terminal in London and the JB-107 is currently in Algeria where she is deployed to take bottom samples for the construction of a new breakwater", says Schukking.

Newbuild Programme

About three years ago the company decided to shift its focus more towards the offshore oil and gas industry and an extensive new building programme for six monohull jack-ups was initiated. Hardon: "The newbuild programme included four jack-ups of the so called MSC SEA 2000 type, which were originally destined for operation in the oil and gas industry. Furthermore we ordered two larger platforms of the MSC SEA 2750 type. In 2008 we took delivery of the first two jack-ups, the JB-109 and the JB-110. But at that time the market faced a significant shortage of jack-up platforms. And shortly after we took delivery of the IB-109 and the JB-110 we got an offer we couldn't refuse and we sold the JB-109 to A2Sea and the JB-110 to Seafox. So we never actually got to use the first two newbuilds ourselves." With the delivery of the JB-114 and the JB-115 the four platforms of the MSC SEA 2000 type have now all been built. "Even though we originally aimed at the oil and gas industry, both the JB-114 and the JB-115 will be used in the offshore wind construction market. Particularly in Europe this is a booming industry right now and there is a shortage of jack-up platforms in this market", Schukking adds.

Maintaining Flexibility

The last jack-up of the newbuild programme is the JB-117, of which construction is expected to



commence later this year. Ronald Schukking elaborates: "The JB-117 would originally be of the MSC SEA 2750 design but we have upgraded it to MSC SEA 3250 with a jacking capacity of approximately 7,500 t. We basically see three possibilities for the JB-117: it could either be a crane platform, a drilling platform or an

Perfect timing for a newbuild programme

accommodation platform. In order to maintain our flexibility, we don't want to make that decision right now. That's why we have decided to start building the platform, but without making a decision on the crane just yet. Usually the delivery time of cranes is quite long, but given the current economical situation we expect to have no problem finding a crane if and when we need it." When asked where the JB-117 will be build, Schukking adds: "We are currently in negotiation with several shipyards to see what would be the best option for us. It looks that we will stay with Drydocks World Nanindah in Batam, Indonesia as we are very familiar with the yard and we are satisfied with the quality of the work. The decision will be made very soon as we want to start building late 2009."

Fortunate Situation

Despite the turmoil in the financial market where many companies are experiencing the effects of the economic downturn, Jack-Up Barge seems to be doing extremely well.

Maarten Hardon elaborates: "We are certainly coping with some effects of the financial crisis. For instance, the utilization rate of our smaller modular jack-up barges, that are mainly used in the civil construction industry, is about 75% which is lower than last year. On the other hand, in the offshore wind construction market there is a shortage of larger jack-up platforms, so our new builds JB-114 and JB-115 are in great demand today." Jack-Up Barge's newbuild programme appears to have perfect timing.

New Maintenance Method

Jack-Up Barge sees a great future in the offshore wind industry. Schukking: "It speaks for itself that our newbuild programme has kept us quite busy in the past years but even so, we always try to anticipate the future. Innovation is key for us." One of the ideas that the company is currently exploring is a new maintenance method for offshore wind turbines. "As a result of the often remote location of the wind farms, and the varying sea conditions, it is a complicated operation to maintain the turbines. Today's maintenance systems are often expensive, dangerous and













limited to mild sea states. The most critical point of the current methods is the transfer of personnel to the turbine. Even with a mild sea state, the transfer of personnel and equipment from a moving ship is a challenging and dangerous operation. To overcome these issues we are exploring the idea of a small, selfpropelled, jack-up barge combined with a mounted aerial platform. For this project we have joined forces with German company Ruthmann, a specialist in mounted aerial platforms. The project is currently at the preliminary phase of development as we have only just started the feasibility study. And who knows, we might come up with other exciting ideas in the near future!", Schukking concludes.

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Maarten Hardon (left) and Ronald Schukking



Jack-Up Barge B.V.,