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Arab Water World

عالم المياه العربي

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Power Supply Solution for Drilling Rigs

Siemens Energy has received an order for two complete electrical power generating stations, including Siemens' "closed ring solution", for supplying offshore drilling rigs with electricity. The 7th generation semi-submersible drilling rigs of the Frigstad D90™ design are under construction at the Chinese shipyard Yantai **CIMC Raffles Offshore Ltd** in Yantai, China. Delivery of the first drilling rig to **Frigstad Deepwater Ltd.** is scheduled for December 2015. The second unit is to be delivered six months later. The order also includes an option for equipping a further four drilling rigs with power supply systems over the next four years. The Siemens systems are to be used onboard the drilling units of the Frigstad D90™ design, developed by Frigstad Engineering and tailor made for safe and efficient exploration and development drilling in ultra-deep waters. The rigs will be capable of operating in water depths up to 12,000 feet and drilling to a total depth of 50,000 feet. Siemens' scope of supply includes the entire power supply systems, each consisting of medium-voltage switchgear, transformers, drilling-drives, low voltage switchgear, variable frequency drives (VFD) and a power supply system for dynamic positioning (closed ring DP3), which enhances flexibility



Siemens systems are to be used onboard the drilling units of the Frigstad D90™ design

and streamlines the power management system of the rig. The "heart" of Siemens' scope of supply is the closed ring design which is the only class-approved solution for operating with permanently closed bus-ties in the Norwegian certification body's (DNV) DYN-POS-AUTRO and DYNPOS-ER class notations. ■

Fraste's Italian Drilling Rigs through Africa

With success and extreme customer satisfaction, **Fraste** recently completed a very important supply for



The four multipurpose drilling rigs delivered by Fraste to Algeria

the Central Government of Ethiopia: twelve water well drilling rigs, different models, with drilling capacity from 100mt to 500mt depth, destined to various water wells and investigation projects within Ethiopian regions. Each of these rigs include on board mud pump, all drilling tools and separate air compressor. After the rigs are set up for drilling at destination, Fraste carries out an in-depth training course on site, the commissioning of machines and a practical test by drilling one complete water well with each of the supplied rigs using specialized highly skilled technicians. In Algeria, Fraste supplied four multipurpose drilling rigs, suitable for geophysical investigation and for water wells drilling. The customer is an important contractor in geophysical investigation within the oil and gas research business in the Sahara desert. The working situations of these machines are severe with extreme environmental and climate conditions, every day. The customer is clearly satisfied with the performances of FRASTE FS 300 drilling rigs and these last four rigs are the re-confirmation of Fraste drilling rigs, taking from 7 to 11 rigs his Fraste fleet, since 2006, all of them FRASTE FS 300 type. Machines are mounted on ASTRA 6x6 truck, desert version, with extra-large tires, to maximize the capability of Fraste drilling rigs to reach any place without well-trodden trails. ■



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Serving the Water, Wastewater, Desalination & Energy Sectors in MENA Since 1977

A large yellow and blue Fraste FS 300 drilling rig truck is parked on a paved area. The truck is equipped with various drilling components, including a large yellow engine compartment, a blue frame, and a tall mast structure. The background shows a modern building with a grey facade and a clear blue sky with scattered clouds. The truck is positioned in the lower half of the frame, with the mast extending towards the top left corner.

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