



Wind Turbine Installation Vessel “Voltaire”

General:	<p>“Voltaire” is a self-elevating and self-propelled vessel designed for installation of offshore wind turbines. The vessel is under construction at COSCO Shipping Heavy Industries in China and is expected to be delivered to the Jan De Nul Group in 2022. With four approximately 130 m long truss-type legs and a high-speed rack-and-pinion jacking system, the vessel is able to operate on up to 80 m water depth, and with 7,000 m² cargo deck, a 3,000 t main crane and a jacking deadweight of 14,000 t, it is able to carry and install even the largest wind turbines. The vessel is equipped with a DP-2 diesel-electric propulsion system consisting of 8 gen sets, 4 stern thrusters, 2 bow thrusters and 2 retractable bow thrusters. The accommodation block, which holds 100 crew single cabins, is unique in that it is divided into two separate blocks – one in each side – which allows long cargo items to be stowed in the CL between the two blocks. The vessel is further equipped with a helicopter deck.</p>	
Main Particulars:	<p>Length overall, excluding/including helideck Breadth, moulded Draught, max Depth to main deck Deadweight, max. Deadweight, for jacking</p>	<p>169.30/181.78 m 60.00 m 7.50 m 14.60 m 21,500 t 14,000 t</p>
Capacity:	<p>Main crane – main hoist max lifting capacity Aux. hoist Cargo deck</p>	<p>3,000 t 250 t @ 135 m 7,000 m², max. UDL 20 t/m²</p>
Speed:	<p>Service speed, max.</p>	<p>11.5 kn</p>
Machinery and Equipment:	<p>Diesel generator sets (6.6 kV, 50 Hz) Emergency generator Azimuth stern thrusters Bow tunnel thrusters Retractable azimuth bow thrusters</p>	<p>4 x 3,535 kW 4 x 2,650 kW 600 kW 4 x 3,000 kW 2 x 2,600 kW 2 x 2,600 kW</p>
Miscellaneous:	<p>Classification Flag</p>	<p>DNVGL Luxemburg</p>
Scope of Work:	<p>The vessel is designed by Jan De Nul, but KEH has made a review of the general arrangement and the lightweight calculation and tender design drawings and FEM analysis of the main hull, legs and spud cans, leg wells, jacking frames and main crane pedestal.</p>	
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