



Cadeler - Pacific Orca & Pacific Osprey

General:

The self-elevating and self-propelled vessels were designed for Cadeler A/S (former Swire Blue Ocean), Denmark, for installation of offshore wind turbines and support in the offshore oil & gas sector. The first of the two vessels was delivered from Samsung Geoje Shipyard in October 2012 and the second to follow in the winter of 2013.

The vessels are equipped with six 105 m long truss-type legs and a high-speed rack-and-pinion jacking system. The long legs enable them to jack to a height of 17 m above the water on 60 m water depth, and thus elevated safely above the waves they can survive even the most severe storm conditions. Should 60 m water depth not be enough the legs can be lengthened by further 15 m. The 1,200 t work-around-leg crane is capable of installing 500 t heavy nacelles on top of turbine towers 120 m above the sea, and the 4300 m² cargo deck has space for up to twelve 3.6 MW turbines. The relatively fine hull lines in the bow gives the vessels a good speed even in higher waves and with 4 stern thrusters, 2 bow thrusters + 2 drop-down thrusters and a DP-2 dynamic positioning system the vessels have state-of-the-art maneuverability. The accommodation holds 111 crew single cabins with private bathrooms as well as necessary crew facilities and offices. A heli-deck is fitted forward above the accommodation block for transfer of crew.

Main Particulars:

Length o.a.	160.90 m
Length p.p.	155.60 m
Breadth	49.00 m
Depth to main deck	10.40 m
Draught, design.	5.50 m
Draught, max.	6.00 m
Deadweight for jacking	8,400 t

Speed:

Service speed, 90 % MCR, 15 % S.M.	13.50 knots
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Machinery and Equipment:

Diesel electric	
Main generator sets	8 x 2.8 MWe
Stern thrusters	4 x 3.4 MW Compact Azipod
Bow thrusters	2 x 2.2 MW retractable + 2 x 2.2 MW tunnel

Capacity:

Capacity of main crane's main hoist	1200 t @ 31 m (2x 600 t hooks)
Capacity of main crane's aux. hoist	500 t @ 50 m
Capacity of aux. crane	40 t @ 40m
Helicopter landing deck	D= 22 m @12.8 t

Miscellaneous:

IMO number "Pacific Orca" / "Pacific Osprey"	9601326/9621704
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Scope of Work:

Conceptual and Tender Design developed for the Owner, including:
 General design and contract specification
 Lines plan and supervision of towing tank and wind tunnel testing
 Stability and lightweight calculation
 Structural design
 Layout of machinery spaces

Ref. No.:

KEH 07086 / 10073