

The CDC Design Portfolio

For operations in the offshore wind market CDC has a double-decker jack-up design, Heron, capable of reaching the nacelle of a wind turbine. This purpose-designed jack-up is to fulfil the longterm heavy maintenance and component exchange tasks and servicing eliminating the reliance on large boom cranes, which results in fewer days lost to weather. The second elevating deck and extending platform provides more efficient means of removal / exchange of turbine components, safer access, walk-to-work at nacelle.

<http://bit.ly/2wBkCb4>

Other CDC designs include the Chameleon, a Multi Activity Unit (MAU). The MAU can perform Wind Turbine construction, as well as operate in O&G where it can perform drilling, well servicing, intervention, P&A and decommissioning. It is equipped with a cantilever having a maximum outreach of 22.5 metres with a corresponding load capacity of ~1,500 t. <http://bit.ly/2fdi6fQ>

Each vessel design begins with the proprietary hull. The CDC hull is DP2, self-propelled and is designed using block-modular principles meaning it is quicker, easier and cheaper to construct. The Hull form-factor principles allow capability, capacity and dimensional changes without major redesign.

CDC designs include a Mobile Production facility (MOPU) for small pools or as an alternative to, or replacement for aging platforms where reservoirs are still flowing.

The MOPU can be paired with subsea storage facility, becoming the MOPSOU. That's the CDC MOPU / MOPSOU concept. <http://bit.ly/2wbfZ2p>

The CDC designs are protected IP in the UK, USA and South East Asia. The vessel designs, Chameleon, Heron and MOPU, have ABS Approval in Principle.

A detailed description of the CDC IP portfolio is available on request.

The CDC Team

Iain Steven is Managing Director supported by Jacqueline and Iain Mac. They are based in Glasgow, Scotland, with 3 additional silent shareholding partners.

To find out more about how CDC designs can boost your technological and innovative progression as well as giving your in-house designs a competitive advantage:

Call Iain on +86 137 6413 4383 (China) or +44 776 593 7933 (UK).

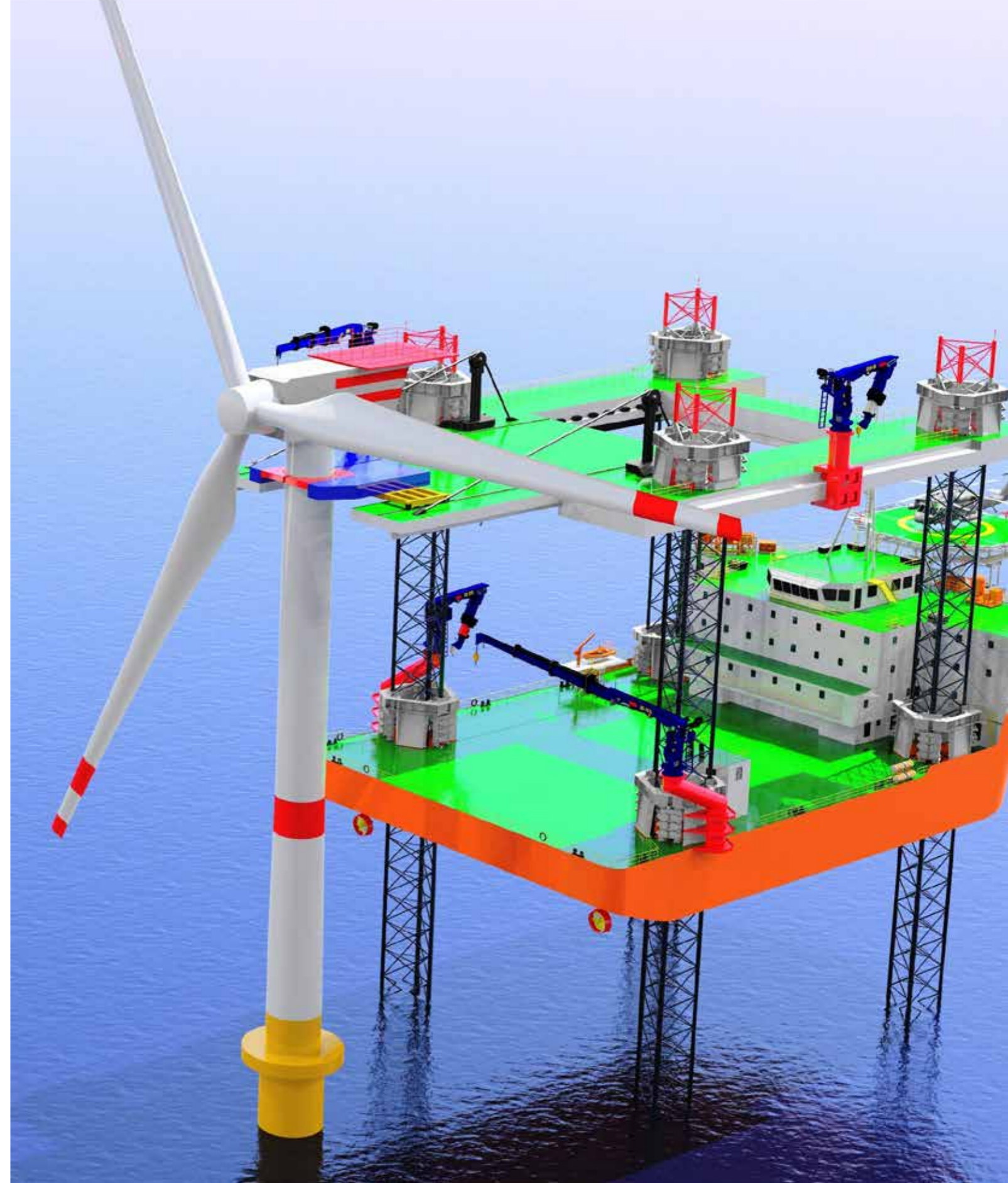
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CDC Scotland Ltd, marine engineering specialists delivering concepts and designs to increase the productivity and efficiency of vessels in offshore O&G and Renewables.





'THE HERON'

Particulars and General Specifications

Classification: ABS (American Bureau of Shipping) – AIP
 Self Elevating - Self Propelled – Unrestricted Service, with following notation options:
 +A1 - Self Elevating, MOU, AMS, ACCU, DPS-2, DFD (Dual Fuel ready). Offshore Support Vessel (WIND-
 IMR) + (WI-Ready) + (WT-Ready), Construction and Maintenance Service, ENVIRO-OS+, HAB+(WB) / MLC-
 ACCOM.

Basic Outline Technical Specifications

Dimensions

	Std Heron	Form Factor Ex. 1	Form Factor Ex. 2
Length Overall	70.2 m (230.3 ft)	89.4 m	99.6 m
Length Waterline	69.3 m (227.0 ft)	86.4 m	96.9 m
Breadth	42.0 m (137.8 ft)	50.4 m	58.0 m
Hull Depth	6.6 m (21.6 ft)	8.0 m	8.0 m
Hull Draft	4.6 m (15.1 ft)	5.0 m	5.0 m
Length between Leg centers:	38.4 m	50.4 m	63.0 m
Breadth between Leg centers:	33.6 m	37.8 m	45.8/38.3m
Leg Length	a) 122 m (400 ft) b) 127 m (416 ft)		

Other Leg Designs and Lengths available

Leg Length	i) 147 m (482 ft)
(When Increase in leg length for water depth, Vessel length / breadth scaled accordingly by 'Form Factor')	ii) 164 m (538 ft)
	iii) 187 m (613 ft)

Working Areas / Capacities

Deck Space (Main Deck)	1,400 m ² (27,000 ft ²)	10.0 t / m ²
Second Deck and Extending Platform	1,400 m ² (27,000 ft ²)	7.5 t / m ²
Other Areas of Outside Deck Available	200 m ² (4,000 ft ²)	1.2 t / m ²

Performances

Economical Service Speed	6.5 knots
Maximum Speed (Large Engine Variant)	10.5 knots
Operating Ambient	(-10°C) to +45°C
Accommodation (Example only)	75 single / 150 x 2 man
Helideck – CAP 437 for Sikorsky S-61N / S-92 / Super Puma / EC 225H	

Weights

Hull Light Weight (approx)	5,350 t
Leg & Spud Can Weight (127m) (approx)	2,900 t
Second Deck (approx)	650 t
Estimated VDL	2,500 t
Max Elevated Weight	8,500 t (approx)

Leg & Jacking Features

Electric Rack & Pinion Elevating Speed - (BLM)	0 to 1.2 m / min (4.0 ft / min)
Hull Jacking –	3 Layers BLM D60H
2nd Deck Jacking –	2 Layers BLM D60H Each pinion @ 157 t

Service Fluid Volumes

Fuel	843 m ³
Potable Water / Fresh Water	972 m ³
Ballast	~1,120 m ³

Operations Fluid Volumes

Drilling Fluids:- Drill Water / Base Oil / Brine / Completion Fluid	1,392 m ³
Active Mud / Completion Fluids up to SG 2.2	714 m ³
Combination of Drains / Waste / Dirty / Bilge	269 m ³
Bulk – P - Tank (Barite / Bentonite / Cement 2 x 45 m ³)	90 m ³

Cranes Capacities Crane capacity and type according to Client

Z - Pedestal	60 t
Under 2nd Deck Gantry	100 t
2nd Deck - Lift Out / In Crane	100 t

Navigation & Communication

Kongsberg Integrated Vessel Control & DP
 K-Pos, K-Chief, K-Thrust, K-Safe
 Full Worldwide Unrestricted Service Equipped Navigation Suite

Moonpool

Capacity for through centre line Moonpool up to 7 m x 7.5 m

