

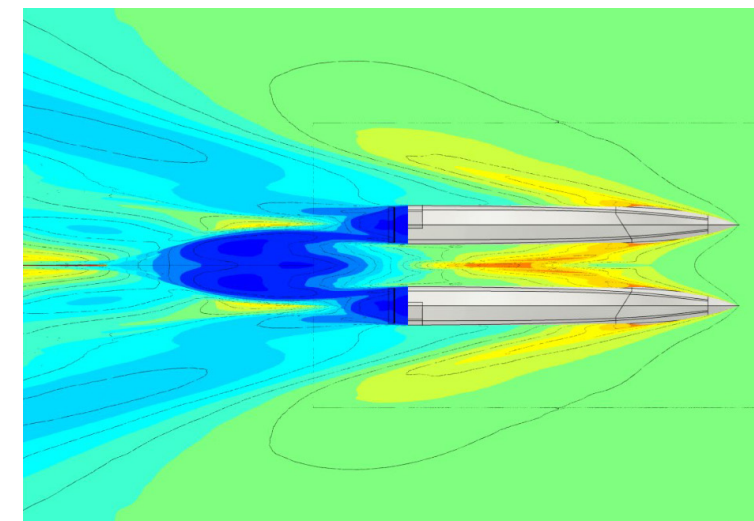
DIVERSE MARINE TYPHOON CLASS CTV

Offshore Wind Crew Transfer Vessel

01-2025



This image shows the ultra-fine entry lines below the main chine and heavily flared topsides above. These features allow for increased speed and comfort through head sea and bow quarter seas and the flared bow ensures equally as good performance in following and stern quarter seas. The fine bow also reduces vertical acceleration and movement when the vessel is thrusting onto a turbine.



During the CFD process, the design team assessed many options to reduce hull resistance and as a result the hull form dismisses a conventional chine construction in favour of a rounded bilge type design. In CFD this resulted in a 11% reduction in resistance at transition speed, commonly referred to as 'hump speed' and a 7% reduction in resistance at operational speed. In addition, a further 21% reduction in resistance at service speed is gained through the transom foils, also reducing the running trim. Reduction in resistance results in a reduction of fuel burn and CO2 emissions speed for speed.



This visual clearly illustrates the hull form but also visualises the high wet deck. A higher wet deck allows for operation in higher sea states with less wet deck slamming, the limiting factor of any conventional catamaran, in fact zero slams per hour at 20kts in a 2m Hs head sea. This is usually a compromised solution by lowering the wet deck to be able to lower the passenger space to reduce the vertical accelerations and motions causing sea sickness. This is mitigated on this design by a high wet deck forward and diffuser to direct the waves and bow wash through to the stern exit. A resilient deck house also assists with reducing motions as well as reducing noise and structure borne vibration.

The Diverse Marine Typhoon Class CTV has been developed using 20 years of experience of such craft in combination with designer, builder, multiple CTV operators, wind farm developers and prime contractors to meet O&M project requirements.

Extensive CFD has been carried out to develop the hull form that incorporates an ultra-fine entry for excellent head sea performance and tower access but with high reserves of buoyancy above the main chine to provide for equally good following and stern quarter sea keeping performance.

The hull form has been optimised to maximise efficiency without compromising performance ensuring the form is well suited to future alternative fuel and mixed fuel installations. The Typhoon Class is offered as standard with Zero Emissions (Power Management) class notation, recognising its reduction in fuel consumption and CO2 emissions. Further the Typhoon is fitted with transom foils to reduce resistance, increase performance whilst decreasing passenger motions, fuel consumption and CO2 emissions.

The high bow and low propulsion line ensure impressive access limits whilst a resilient deckhouse provides a safe and quiet environment for crew and technicians during transit and transfer.

Available as Quad IPS, Quad Hybrid IPS, Twin IPS Professional Hybrid, Twin CPP, Twin CPP Hybrid and in the future alternative fuels leading to full electric to cater for different end user requirements and budgets.

DIVERSE MARINE TYPHOON CLASS

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Offshore Wind Crew Transfer Vessel

GENERAL

Construction Material	Aluminium
Superstructure Mounting	Resilient
Classification	Bureau Veritas I+ Hull • Mach Wind Farm Service Ship-SI Sea Area 3 ZE (PM)
Flag	MCA Workboat HS-OSC

DIMENSIONS

Length Overall	25.20m
Beam Overall	9.31m
Depth at F12	4.52m
Maximum Draft	2.40m
Lighthouse Displacement	74.80T
Deadweight	38.50T
Cargo Area	80m2
Deck Load	2T/m2
Crew	3-4
Industrial Personnel	24

TANK CAPACITIES

Marine Gas Oil	11 m³
Fresh Water	2 m³
Grey Water	1 m³
Black Water	1 m³
Bilge/Dirty Water	0.7 m³
AdBlue/UREA	2 m³

PROPULSION (Base Vessel)

Main Engines	4 x Volvo Penta IPS1050
Installed Power	3352kW
Gearboxes	4 x Volvo Penta IPS 1.99:1
Propulsion	4 x Volvo Penta IPS30 Drives
Propellers	8 x Volvo Penta Q2
Speed Sprint	33.0 kts (Condition 4)
Speed Service	28.0 kts (Condition 3)

ELECTRICAL EQUIPMENT

Network	24v DC, 400/230V 50Hz AC
Generator Sets	1 x BETA GEN40 39kW
Energy Management System	112.5kWh 800VDC

DECK EQUIPMENT

Anchor	1 x 150kg VHHP
Anchor Winch	Hercules AAW-150
Deck Crane	TMP 900XL
Bow Centre Fender	Buoyant Works

DECK EQUIPMENT (Cont.)

Bow Shoulder Fender	Buoyant Works
Side Fender	Buoyant Works
Pressure Washer	30-200 bar; 400v, 16l/min FW/SW
Fuel Transfer System	Integrated, Below Deck Reel

FIRE FIGHTING

Engine Space	STAT-X
Fire Pump	1 x DESMI 416l/min, 400v 1 x DESMI 250l/min, 400v
Loose Extinguishers	Class/Flag Requirements

ACCOMMODATION

Main Deck	2 x Twin Cabins (6 Berth) 1 x Internal Stores 2 x External Stores 1 x Battery Room (FiFi / Air Conditioned) 2 x Heads/Shower Spaces 24 x KPM DS100 c/w 4 Point 1 x Galley 2 x PAX Storage Rack DM Command Console 3 x KPM DS100 c/w 4 Point 1 x Chart Table Area 1 x Crew Mess Area
Wheelhouse	Toshiba Air Cooled Reverse Cycle, Underfloor Heating Throughout + Radiators

NAVIGATION & COMMUNICATION

Main Radar	Furuno FAR2218B
Main Electronic Chart	Furuno FMD3100
Second Radar	Furuno DRS4DNXT
Second Electronic Chart	Furuno Time Zero Dual TZ Pro Work
Monitors	2 x Hatteland 24" 2 x Furuno MU190 1 x 15" EMS
Navtex	Furuno NX700B
DGPS	Furuno GPI70
AIS	Furuno FA170 Class A
Compass	Furuno SC70 Satellite
Communication	2 x Icom GM600 Class A 1 x Icom GM800 Class A
Log	1 x Walker 7070
Autopilot	Volvo Penta
Talkback	Phontec 3102 20 Way
Echosounder	Furuno FE800
CCTV	16 x IP67 HD + NVR
Internet	Starlink Satellite Array
Passenger Entertainment	Freeview & Radio/DAB

