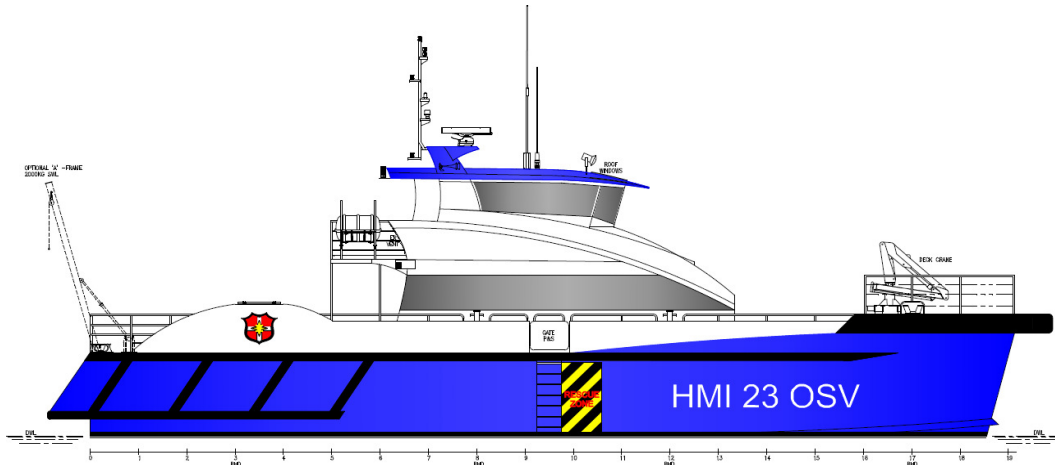




HARWOOD MARINE



23MTR ALUM. CATAMARAN : OFFSHORE SUPPORT VESSEL

PRINCIPAL DIMENSIONS:

Survey Length	:	23.55 metre	Passengers	:	12 max
Moulded Beam	:	8.00 metre	Crew	:	3-4 pending Flag State req.
Moulded Depth	:	3.25 metre	FO Capacity	:	approx 2 x 3000 litres
Draft	:	1.70 metre to propeller tip	FW Capacity	:	approx 1 x 1000 litres
Max. Speed (approx.)	:	22-26 knots pending machinery selection			

PROPULSION:

Main Engines	:	2 x 550-750 kW			
Gearboxes	:	2 x gearboxes with standard ratios of approx 2.5-3:1			
Rudders, Propellers & Shaft	:	2 x 5-bladed approx. 900-1000mm diameter fixed pitch propeller with bronze nuts. Shafting to be material 2205 duplex grade stainless steel, tapered and keyed both ends fitted with nuts and keys. Rudder stock and rudder to be 316 stainless steel. Servogear controlled pitch propeller is optional.			
Generator	:	2 x generator approx 35-50 kVA+			

SURVEY AND FLAG:

Class	:	NSCV/USL Class 2C	Hull Structure	:	Lloyds SSC G3
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LIFE SAVING APPLIANCES/ FIRE FIGHTING EQUIPMENT (As per survey requirements):

Life saving appliances to comply with Survey requirements. Man overboard recovery system is optional.
Fire fighting equipment to comply with Survey requirements. Structural Fire Protection to Survey standards.

NAVIGATION AND COMMUNICATION EQUIPMENT (As per survey requirements):

GNSS Receiver	HF Radio	Magnetic Compass, 125mm Dia Card
Echo Sounder	Navigation Lights	VHF Radiotelephone & Suitable Antenna System
Speed and Distance Indicator	Radar	Communication system to emergency steering position
Clock, Barometer	Signalling Light	Humphree active ride control system (optional)
Night Vision (optional)	Charts and Nautical Publications	

WINCHES/WINDLASS/ MOORING AND DECK EQUIPMENT:

Anchors and chain to survey requirements with roller.
2 x double bollards with fairleads at aft, 2 x side double bollards at bow and 4 x single bollards at amidships
(Seismic winch, CTD winch, A-Frame, **Houlder** crew transfer system, seismic survey equipment, moon pool, office area, deck crane, skiff skiff winch and tow hook are all optional.)

FITOUT:

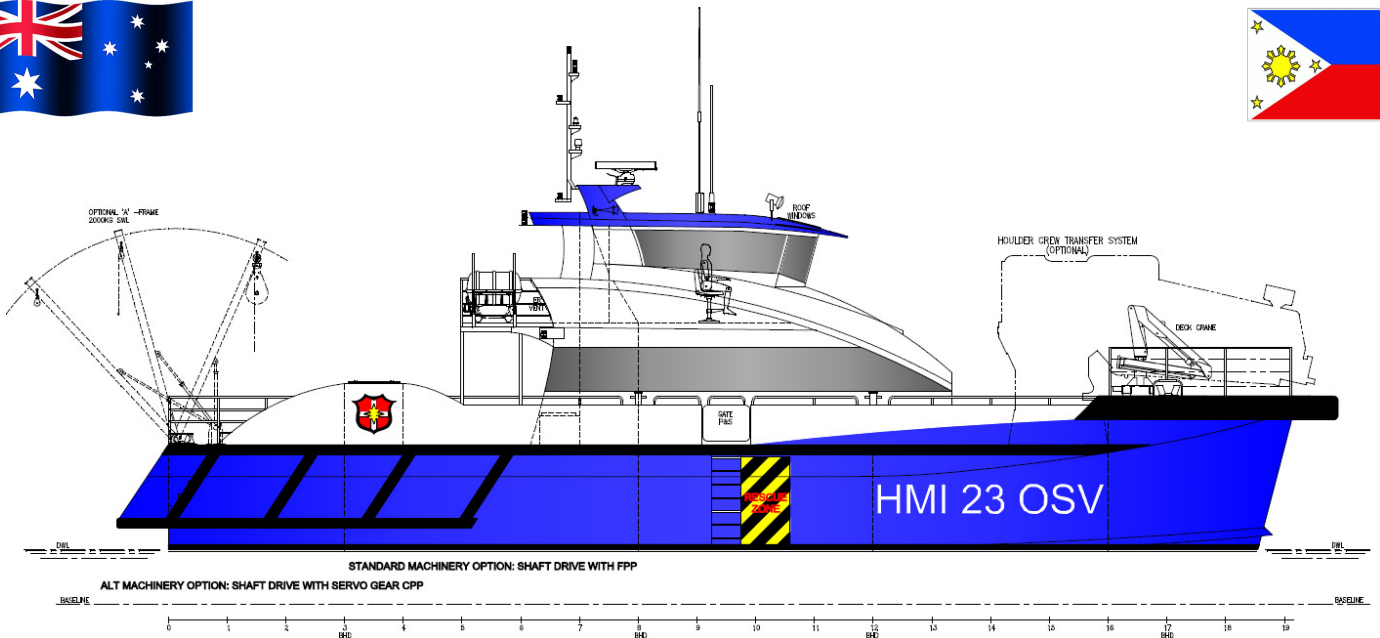
Main deck to have Beurteaux passenger seats or similar good for 12 passengers, dinette settee and small galley. Toilet is fitted aft.
Access gate fitted amidships port and starboard.
Interior wall linings to be honeycomb panels. Deckhead linings to be Dampa tiles or similar.
All windows are toughened safety glass (TSG). Wheelhouse windows are clear with windscreen wiper fitted at the front windows.
Flush deck hatches are fitted at aft peak and hull accommodation. Removable softpatches are to be fitted in way of engine rooms.
Weather deck to be non-slip painted surface.
(Crew hull accommodation at port and starboard, hydrographic work area at wheelhouse, **Mackay** isolation mounts for superstructure, standard container deck locks and 32 amp reefer outlets are all optional.)

CONTACTS:

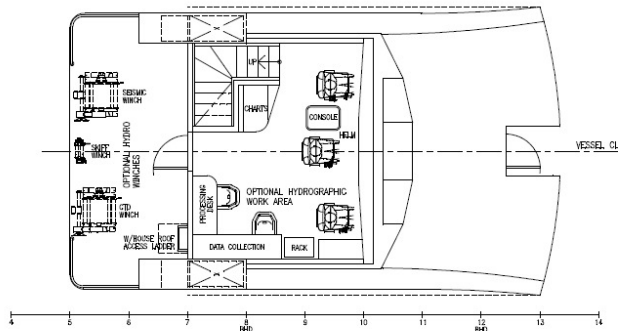
Australia & New Zealand
Harwood Marine – Harwood
162-164 River Road,
Harwood Island, NSW 2465
P.O. Box 96, Harwood Island,
NSW 2465, Australia
Phone: + 61 (0) 2 6646 4222
Fax: +61 (0) 2 6646 4472

South East Asia
Harwood Marine Int'l. – Cebu
1S1 Ground Floor, Iron Wood Copenhagen
A. C. Cortes Avenue, Mandaue City 6014
Cebu, Philippines
Phone: +63 (0) 32 318 1738
Email: peter@harwoodmarine.com.au
Mobile: +63 (0) 917 308 3955

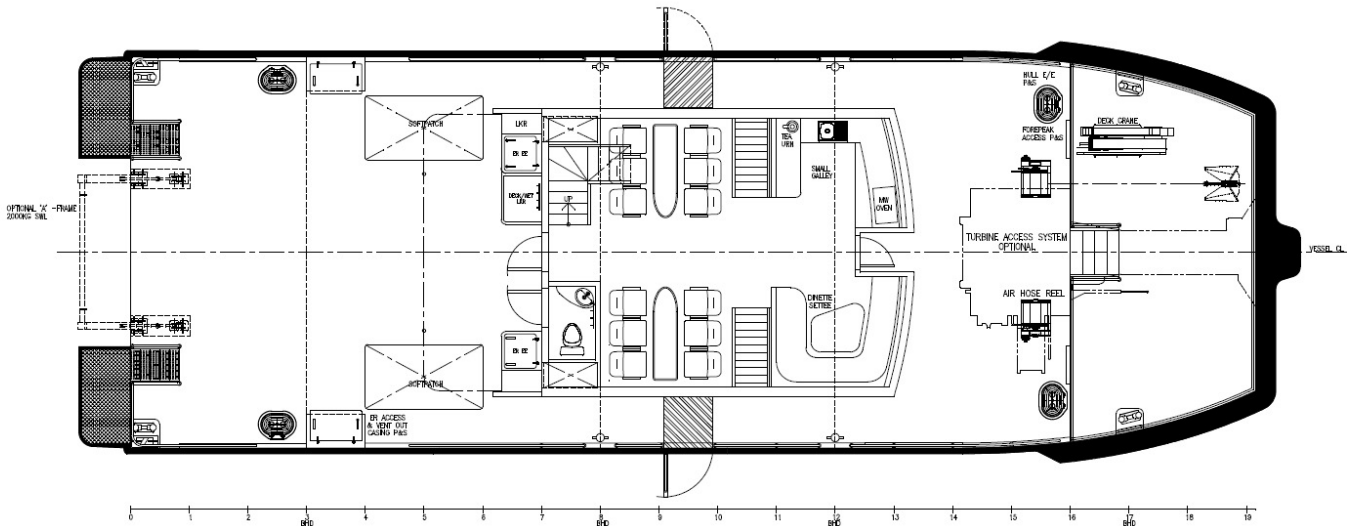




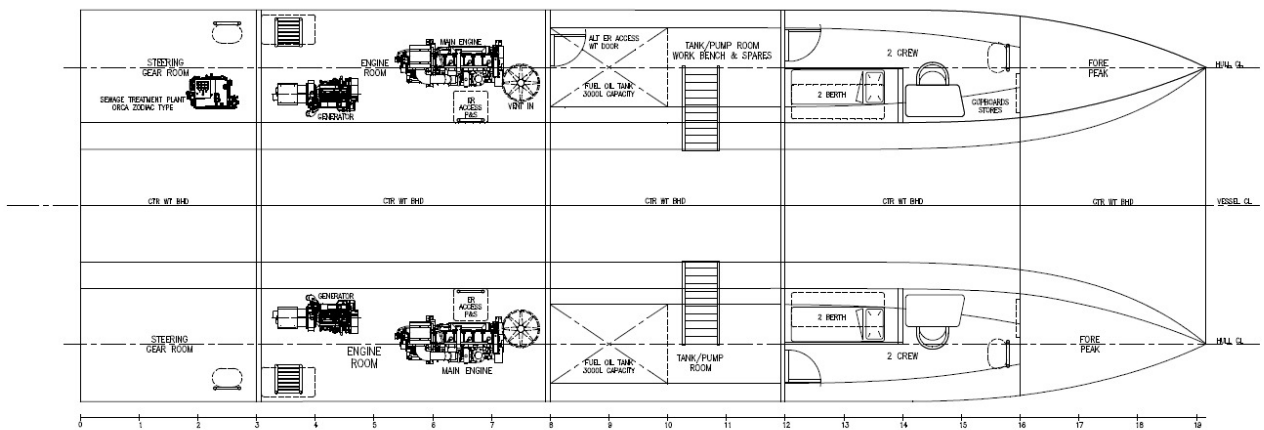
STARBOARD PROFILE



WHEELHOUSE PLAN



MAIN DECK PLAN



HULL PLAN