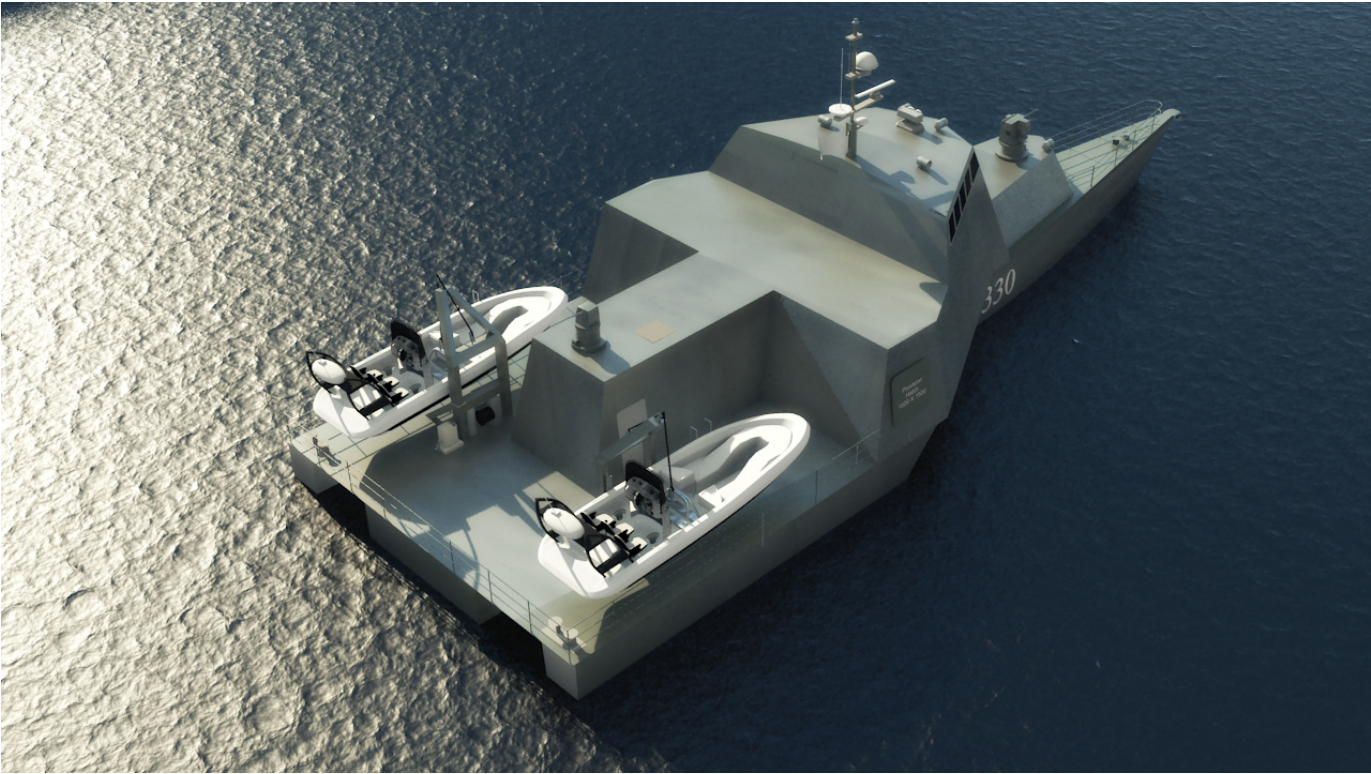


# GENERAL DESCRIPTION CNHP330

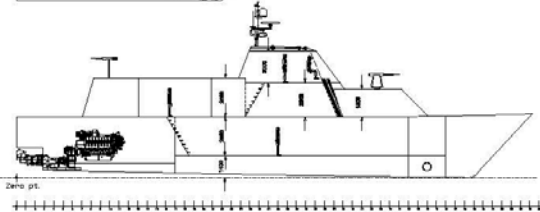
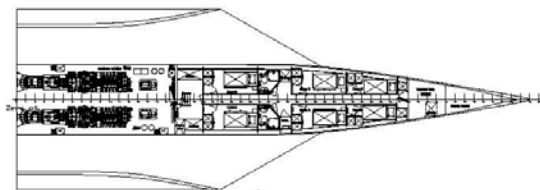
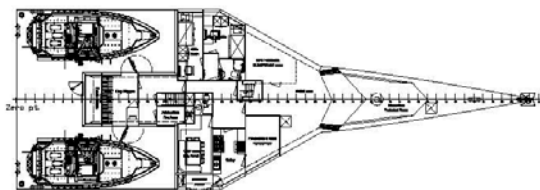
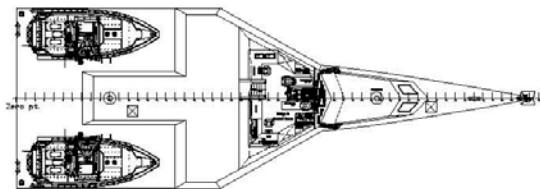
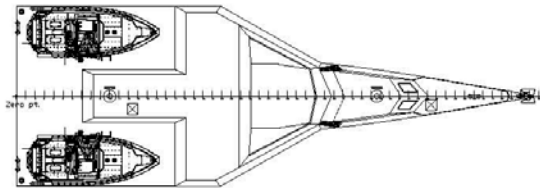
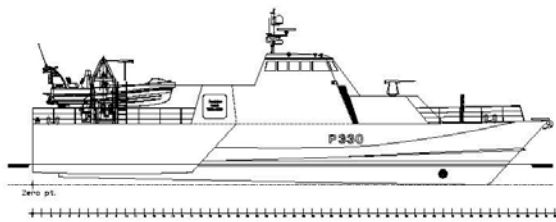


PATROL BOAT

33 m 18







**PATROL BOAT / Operational profile:**  
 Patrol duties  
 Maritime safety  
 Securing economical waters and coastal waters  
 Search and Rescue  
 Fast Intervention force

**MAIN PARTICULARS**  
 LOA 33,18 m  
 Breadth moulded 11,00 m  
 Depth to PFD Deck 3,90 m  
 Design Draft 1,20 m  
 F.D 34 m<sup>2</sup>  
 Deck Working Area approx. 100 m<sup>2</sup>

**COMPLEMENT**  
 Crew 15

**PROPULSION**  
 Main Engines 2 x MTU 16V2000M64 / 1.630kW @ 2.450rpm  
 Gearboxes 2 x ZF 300  
 Propulsion 2 x Hamilton Waterjets HM271  
 Bowthruster 1 x 90 BkW

Service Speed 37.0 knots  
 Range @ Service Speed 1000 nm  
 Max. Speed 50.0 knots  
 Economic Speed 17.0 knots  
 Range @ Economic Speed 1800 nm

04	28/03/2018	JL	Bridge updated		
02	16/03/2018	JL	Vessel Details updated		
01	07/03/2018	JL	Beam updated		
00	04/03/2018	JL	Plan Issue		
Rev.	Date	Author	Revision Description	Approved	Date

Project		P330 Patrol Boat		Drawing No.	001
Title		Concept General Arrangement		Date:	28/03/2018
For:		Hesse Charter Naval		Project No.:	n/a
Format:	A0	Scale:	1:100	Author:	J.L.
				Reviewer:	CS

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## GENERAL DESCRIPTION

The PATROL BOAT CNHP330 is a high-speed Vessel. The Vessel is well suited for the following services:

- o Patrol duties.
- o Maritime safety.
- o Securing economical waters and coastal waters.
- o Search and rescue.
- o Fast intervention force.

The Vessel is propelled by waterjets, which are driven by diesel engines.

The general arrangement plan shows the lay-out of the vessel

### DESCRIPTION

HULL / SUPERSTRUCTURE MATERIAL Aluminium plating 5083 H1111 & Extrusion 6060 T5  
BASIC FUNCTIONS Military Patrol

### CLASSIFICATION

Bureau Veritas. The classification notation will be:

### REGULATION

I ✘ Hull • MACH. Light ship / Fast Patrol Boat

Applicable rules of IMO (as far as applicable for this type and size of Vessel):

COLREGS - International Regulations for Preventing Collisions at Sea

IMO Stability rules IS code 2008 MSC267 (85) and all applicable amendments.

Marpol 1973/1978 and all applicable amendments.

International Convention for Tonnage measurements of Ships and all applicable amendments.

### ESTIMATED DIMENSIONS

LENGTH O.A.	33.18 m
BEAM O.A.	11.60 m
DEPTH to FBD DECK	3.90 m
DRAUGHT MAX	1.30 m
DECK WORKING AREA	100 m <sup>2</sup>

### CAPACITIES

FUEL OIL	34 m <sup>3</sup>
FRESH WATER	3.5 m <sup>3</sup>
WASTE WATER	1.2 m <sup>3</sup>
CREW	15
RANGE AT SERVICE SPEED	1090 nm
RANGE AT ECONOMIC SPEED	1500 nm

### PERFORMANCES (TRIALS)

SERVICE SPEED	27.0 knots
MAX. SPEED	30.0 knots

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## GENERAL ENVIRONMENT

The CNHP330 PATROL BOAT is generally designed for the following environment conditions:

SEAWATER TEMPERATURE	MAX. 37° C MINI. 4° C
AIR TEMPERATURE	MAX. 55° C MINI. 0° C
RELATIVE HUMIDITY	90% at 0° C and 50 % at 0° C

The specific design condition of the propulsion installation, air conditioning, heating, etc.

## PROPULSION SYSTEM

MAIN ENGINES	2x MTU 16V2000M84
TOTAL POWER	1630 kW at 2450 rpm
GEARBOX	2x ZF 3060
PROPULSION	2x Hamilton Waterjets HM571
BOWTHRUSTER	1x 50 bkW

## ELECTRICAL EQUIPMENT

NETWORK	230/50 Hz, 24V/DC
GENERATOR	2x Deutz 100 KW at 1500 t/ Mn 1x Deutz 20 KW at 1500 t/ Mn (emergency)
BATTERY	One battery set for starting each engine One battery set for starting each generator One battery set for all other electrical consumers / emergency. One battery set for radio / communication

## DECK LAY-OUT

ANCHOR	Electrical 3.500 Watts
CHAIN (stainless steel)	Diameter 19 mm, length 20 m
LINE	Diameter 24 mm, length 80m
TOWING	Towing bollard on aft deck
TOWING LINES	1x250m, 1x120 32mm
CAPSTAN	2x Electrical 1.500 Watts
CRANE	2x Hydraulic system for Finders
FINDERS	2x 8.80 m Hypalon RIB – 10 persons – 2x 150 HP

## LIFE SAVING EQUIPMENT

LIFEJACKETS	20 Lifejackets SOLAS
SAVING EQUIPMENT	All saving equipment SOLAS for the Boat and national authorities concerned
LIFE RAFT	2x 10/12 persons
INERT GAS EXTINCTIONMACHINE	FM200 in machine
FIRE EXTINGUISHERS	10, CO2 and AFFF types
RESCUE	2x Stretcher transport system

## AUXILIARY EQUIPMENT

ENGINE ROOM VENTILATION	2 Electrical Ventilators machine compartment
GENERAL SERVICE PUMPS	230 V and 24V submersibles

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FUEL SYSTEM	1 Header tank, roll-over proof. Separate systems for each engine. Filters debug system.
EXHAUST SYSTEM	Duplex steel, with water injection
AIR CONDITIONNING SYSTEM	Reverse cycle, 230 V, 180.000 BTU/h and VMC system
WATERMAKER	1x HP 230 l/h
PIPING	All system in Stainless steel type 316L
SALVAGE PUMPS	2x 80 m <sup>3</sup> /h diesel
ALARM MONITORING SYSTEM	Alarms according to class

### ACCOMODATION

The layout of the accommodation and wheelhouse is shown on the relevant General Arrangement Plan.

INSULATION	In accordance with regulation of the classification society.
WHEELHOUSE	4 x Seats, dashboard, desks and bunks seats Control room
MAIN DECK	Deck store, dry room, ammunition fire arms, CO's cabin, Officer's cabin, Toilets, Galley and storage, Mess, Electronic Room, ladder
BELOW MAIN DECK	6 crews cabins, 2 toilets, Thruster room, ladders and escape

### PAINTING

HULL BELOW WATERLINE	Marine Epoxy system and antifouling
DECK	Marine Epoxy system

### NAUTICAL, SURVEILLANCE AND COMMUNICATION EQUIPMENT

SEARCHLIGHTS	Remote controlled
NAVIGATION SYTEM	Raymarine C120 series or similar with 2 radars, 2 gps, chart plotter, echo sounder and two displays. Immarsat, AIS, thermal cameras, receiver, compass, autopilot, intercom.
COMMUNICATION	GMDSS A1, GMDSS A2, 5 hand held VHF