

AL-OFOUQ CLASS PATROL VESSEL



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Following a competitive international tender in April 2012, the marine arm of ST Engineering won the contract to design and build four patrol vessels for the Royal Navy of Oman.

The Al-Ofouq platform is derived from ST Engineering's proprietary 75m Vanguard class patrol vessel design.

With a high speed, good manoeuvrability and good seakeeping performance, coupled with great endurance and comfort, these vessels are designed for prolonged operations, including safety and security operations in coastal to exclusive economic zones.

KEY FEATURES

- 1 HIGH SPEED FUEL EFFICIENT HULL FORM
- 2 HYBRID PROPULSION SYSTEM, COMBINED DIESEL OR ELECTRIC (CODOE), POWERED BY 8000 SERIES MTU ENGINES AND ABB PROPULSION MOTORS COUPLED TO RENK CUSTOMISED GEARBOXES
 MAIN ENGINE: 2 X MTU 20V8000M91, 9,100KW @ 1,150RPM
 PROPULSION MOTOR: 2 X ABB M3BP 450LA 8G, 250KW @ 720RPM
 PROPULSOR: 2 X ROLLS ROYCE MARINE KAMEWA CONTROLLABLE PITCH PROPELLER (CPP)
 DIESEL GENERATOR: 4 X MTU 12V2000M51B, 665KVA
- 3 CHEMICAL, BIOLOGICAL, RADIOACTIVE AND NUCLEAR (CBRN) DEFENCE SYSTEM WITH TWO DAMAGE CONTROL ZONES AND DEDICATED CBRN DETECTION AND PROTECTION SYSTEM IN EACH ZONE
- 4 MODULAR MAST CONCEPT WITH FULL EMI / EMC STUDY PERFORMED AND OPTIMISED FOR SENSORS AND ANTENNAS ARRANGEMENT
- 5 MODULAR MAST CONCEPT WITH 3600 SEARCH RADAR COVERAGE
- 6 OPTIMISED SUPERSTRUCTURE (INCLUDING FUNNEL AND MODULAR MAST) DESIGNED FOR GOOD RADAR CROSS SECTION (RCS) AND INFRARED (IR) SIGNATURES
- 7 OPTIMISED SUPERSTRUCTURE (INCLUDING FUNNEL AND MODULAR MAST) DESIGNED WITH MINIMUM AIR DRAG AND EXHAUST GAS RECIRCULATION
- 8 PROPELLER DESIGN WITH RIGOROUS CAVITATION TEST TO ENSURE MINIMAL ROOT AND TIP CAVITATION
- 9 LOW UNDERWATER NOISE SIGNATURE WITH THE USE OF ELECTRIC PROPULSION MOTORS AND LOW CAVITATION PROPELLERS
- 10 HELICOPTER CAPABLE WITH 5TON SUPER LYNX FOR NAVAL OPERATION SUPPORT AND SEARCH AND RESCUE OPERATION

PRINCIPAL SPECIFICATIONS

LENGTH	75M
BEAM	12.5M
DRAFT	3.55M
RANGE	3000NM AT 16 KNOTS
DISPLACEMENT	1300T
PROPULSOR	2 X CPP

SPEED AND PERFORMANCE

SPEED	27 KNOTS
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GENERAL INFORMATION

RHIB / USV	1
HELICOPTER / UAV	1

ABBREVIATIONS

RHIB	RIGID HULL INFLATABLE BOAT
UAV	UNMANNED AERIAL VEHICLE
USV	UNMANNED SURFACE VESSEL
EMI	ELECTROMAGNETIC INTERFERENCE
EMC	ELECTROMAGNETIC COMPATIBILITY