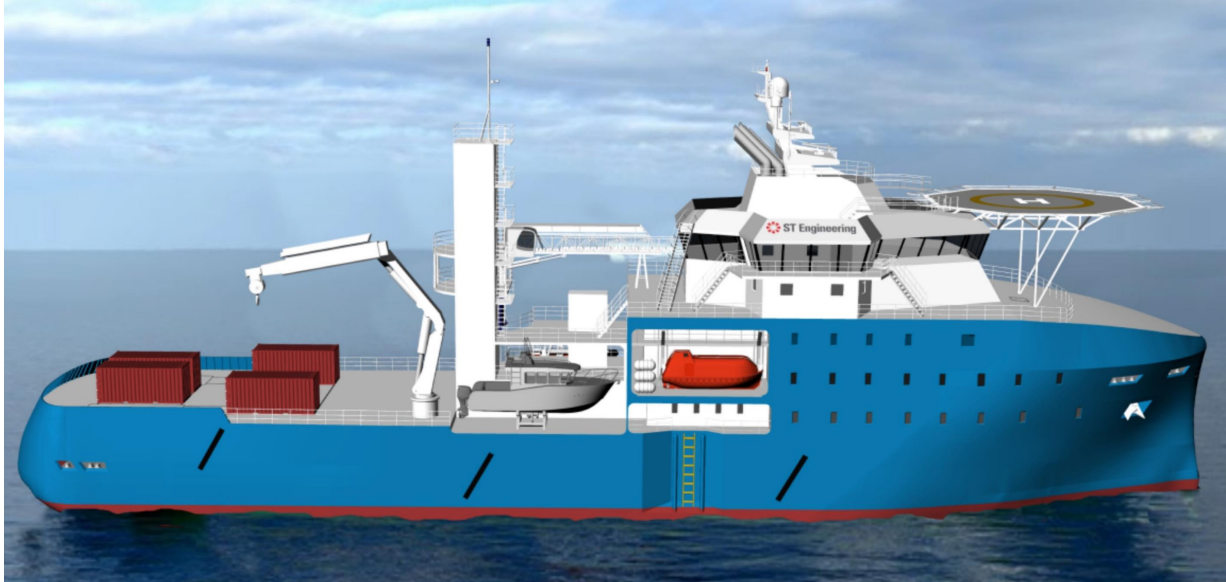


SERVICE OPERATION VESSEL



SERVICE OPERATION VESSEL



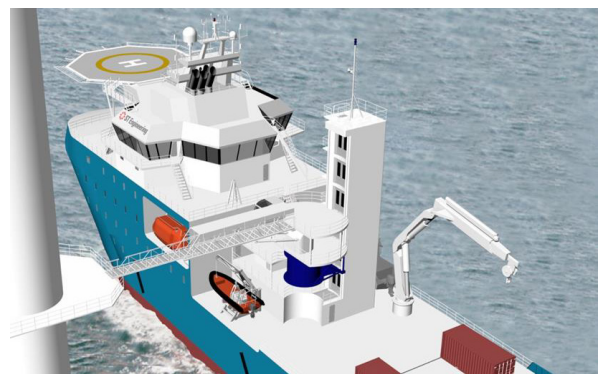
The ST Engineering Service Operation Vessel (SOV) is designed to meet the operational needs of today's offshore renewables industry. Fitted with an electric propulsion system including energy storage system, the SOV is designed based on ST Engineering's innovative Eco-hull for low fuel consumption and enhanced seakeeping characteristics to maximise crew comfort of the crew, service personnel and specialists.

The SOV is configured with two azimuth-type main propulsion propellers, two tunnel bow thrusters and one retractable azimuth forward thruster. The propulsion system, coupled with an advanced dynamic positioning system (DP2) and heave-compensated gangway, equips the vessel for its primary function- the safe transfer of personnel from onboard to offshore wind turbines.

ST Engineering has integrated its proven in-house ship management and sensemaking systems (NERVA SMS²) that adopt data analytics and machine learning techniques to perform predictive maintenance and condition-based monitoring of the equipment, hence providing prescriptive and pre-emptive data to operators for better decision making.

PRINCIPAL SPECIFICATIONS

LENGTH OVERALL (APPROX)	85.20M
LENGTH BETWEEN P.P.	76.00M
BREADTH MOULDED	18.00M
DEPTH MOULDED	7.50M
DESIGN DRAFT	5.30M
SCANTLING DRAFT	5.60
SPEED	13 KNOTS
DYNAMIC POSITIONING	DP II
ENDURANCE	30 DAYS



SERVICE OPERATION VESSEL

MAIN AND AUXILIARY ENGINES

PROPULSION SYSTEM	DIESEL ELECTRIC
MAIN PROPELLERS (DIAMETER APPROX 2400MM)	2 X AZIMUTH THRUSTERS
MAIN PROPULSION MOTORS	2 X 1500EKW
TUNNEL THRUSTERS	2 X 880KW
RETRACTABLE THRUSTER	1 X 880KW
MAIN GENERATOR	4 X 1700 EKW @ 1800 RPM
EMERGENCY GENERATOR	1 X 200 EKW @ 1800 RPM 1 X BATTERY ENERGY STORAGE SYSTEM
BESS	1 X ENERGY MANAGEMENT SYSTEM

CAPACITIES

BALLAST WATER	1400M³
FUEL OIL	750M³
FRESH WATER	600M³
CARGO WEATHER DECK AREA	500M²
SHELTERED DECK AREA	360M²

ACCOMMODATION

CREW	25
TECHNICIAN	60
OTHER FACILITIES: DRYING ROOM, CHANGE ROOMS, GYMNASIUMS, GAMING ROOM, SHOPS, RECEPTION, DAY ROOMS, CONFERENCE ROOMS, LOUNGE, MEETING ROOMS, OFFICES, HOSPITAL, VARIOUS LOCKERS	

ROLL REDUCTION SYSTEM

2 X PASSIVE ROLL REDUCTION SYSTEMS & TANK

NAUTICAL AND COMMUNICATION EQUIPMENT

RADAR	1 X BAND 1 S BAND
ECDIS	2 X ECDIS CHARTING SYSTEM
DGPS	2 X DGPS
GMDSS	AREA 1, 2 AND 3
GYRO COMPASS	3 GYRO COMPASSES PLUS REPEATERS

DECK LAYOUTS

CARGO / PASSENGER LIFT (6 FIXED HEIGHT LEVELS)	1 X 2T CAPACITY SUITABLE FOR 3 PERSONS
MOTION COMPENSATED GANGWAY	600 KG WALK-TO-WORK CARGO / 1000 KG AT TIP
3D MOTION COMPENSATED KNUCKLE BOOM CRANE	20T WITHOUT COMPENSATION 6T WITH COMPENSATION MAX ARM 29.5M MIN ARM 5.0M LIFTING HEIGHT 35.6M
SKIDDING SYSTEM	1 X SKIDDING SYSTEM FOR SKIDDING CONTAINERS
CTV LANDING	1 X PERMANENT BOAT LANDING @ SB 1 X STRUCTURAL REINFORCEMENT READY FOR PS
HELICOPTER DECK (OPTIONAL)	PREPARATION MADE FOR 1 X 7.5T @ 18M D VALUE