



CLASSIFICATION

Bureau Veritas (BV), Diving support-integrated DD Offshore support vessel (Supply) DD

Class Symbols: |± Hull± Mach Navigation Not.: Unrestricted navigation

Add. Class Not.: **±**AUT-UMS (SS),**±** ALM (SS), HEL,

 \pm DYNAPOS AM/AT RS (SS), SDS

Machinery: **±** MACH

Build Location:

North East Shipbuilders Ltd,

Flag State Authority: PANAMA

Registry: Bureau Veritas
Callsign: 3FFC

PROPULSION AND POWER

Forward

3 x KaMeWa Tunnel thrusters, 1,325 kW, 18 Te thrust each

Aft

3 x KaMeWa Azimuth thrusters, 2,200 kW, 37 Te thrust each

DP SYSTEM

- Kongsberg SDP 21
- Kongsberg SDP 11 back-up system (NMD DP Class 3 compliant)

Reference Systems

- 2 x DGNSS
- Simrad HiPAP 500 & 350
- 2 x Lightweight taut wires
- 1 x fan beam
- 1 x RADius 1000

ENVIRONMENTAL REGULATORY NUMBER 99.99.99

POWER PLANT

- 6 x Wartsila W200 series (2,100 kW)
- Total power production 12,600 kW

DIMENSIONS

Length Overall:111.4 mLength Between PP100.04 mBreadth Moulded:22.5 mDepth moulded11.0 mDraft:6.4 m - 7.26 mDisplacement11,935 Te at 7.26 m draftGross Tonnage:9,158 Te

DECK SPACE & MOORING

Above main deck 863 m2 Below main deck 250 m2 Working moonpool 7 m x 5 m

DECK LOAD 5 Te/m2

Max overall 1,140 Te at 1 m above deck

SERVICE AIR

3 x Atlas Copco 23.6 m3/min each, Pressure 7.0 bar

4-POINT MOORING AVAILABLE

2 forward anchors fitted

2 aft anchor systems can be deployed

CAPACITIES

Fuel oil	2,365 m ³
Lube oil	59 m ³
Fresh water	275 m ³
Ballast water	2,383 m ³
Drill water	258 m ³

SERVICE AIR

3 x Atlas Copco 23.6 m3/min each, Pressure 7.0 bar

ENDURANCE

Max period between portcalls 68 days (without Ref.) FW making capacity 50 Te/24 h

Fuel consumption (typical) - In port cons. 6 m³/24 h

- Transit 30-50 m³/day

- DP 22-27 m³/day

VESSEL CAPABILITIES

CRANAGE

Main lifting facility

22.5 m Offshore AHC Box Boom Crane, aft Main Hoist:

Single fall 100 Te @ 29.2 m

Double fall 200 Te @ 26 m Double fall 175 Te @ 28.5 m

Aux. Hoist:

Single fall 20 Te @ 33 m

Additional lifting facilities

- 2 x Subsea knuckle boom cranes 5 Te at 15 m radius
- 1 x Provision crane 1.5 Te at 5 m

VESSEL SPEED

Economical 10.5 knots Maximum 11.5 knots

DIVING SYSTEM

• Deputifiating	450 11151
Current certification	300msv
• No. in sat.	1

• No. of bells 2
• Bell volume 6m3 each

• System volume 114m3 • Gas storage 21,000m3 at 200 bar

Reclaim system fitted to both chamber and bells

HELIDECK

S92 (strengthened for Chinook)

ACCOMMODATION

139 people in 76 cabins

LIFESAVING APPLIANCES

Lifeboats
 (TEMPSC) 4 x 72 person
 (SPHL) 1 x18 divers + 4x crew
 Life rafts 12 x 25 person

Specifications

GSP Falcon is a versatile multi-role vessel that combines heavy lift capability with either diver or diverless intervention support.

Its excellent Dynamic Positioning (DP), station keeping and working weather limits provide a stable platform capable of supporting a Vertical Lay System (VLS), carousel or reel mounted equipment. Verified to Norwegian standards, her innovative design and high degree of sophistication provide a cost-effective solution for a wide range of specialist services, including hyperbaric welding, flexible flowline, riser and umbilical laying, installation of structures, piling and mothership support for trenching and diverless subsea equipment.

Seakeeping characteristics

The vessel's outstanding success in the subsea construction market is attributable to the innovative mono hull design with its passive and active stabilizing systems, which provide a highly stable base for sub-sea operations. These active damping and anti-heeling systems limit the vessel's motion to only 1 to 2 degrees of roll in a Beaufort 8seastate.

Cranage

The vessel's main telescopic pedestal crane is rated to a double fall capacity of 200 Te at a radius of 26 m, with the auxiliary line capable of lifting 20 Te loads at a working radius of 33 m. The active heave compensation (AHC) and constant tension function on the main hoist, ensure excellent control of loads during subsea lifting operations.

Fitted with two 5 Te, 15 m, subsea rated knuckle boom cranes situated on the port and starboard of the vessel, GSP Falcon expertly handles a range of both subsea and onshore lifting operations.

Remotely operated vehicles

The vessel is fitted with a work-class Multi Role Vehicle (MRV) system equipped with state-of-the-art manipulators, sensors and optional tooling packages. It is launched over the vessel's starboard side utilizing a Launch and Recovery System (LARS) located on the starboard mezzanine deck.

This MRV system is operated from Dive Control, which is the hub of all vessel subsea operations. GSP Falcon also has a latest generation Observation Class ROV system located on the port mezzanine deck. This "eyeball" system is equipped with state-of- the-art camera and sensors.

Diving system

Designed with safety and flexibility in mind, GSP Falcon is fitted with a saturation diving complex rated to 450msw, though currently certified to 300 msw, and capable of supporting up to 18 divers under pressure. The system comprises three 6-man twin-lock decompression chambers (DDC) and two 3-man diving bells. The bells can be operated for on bottom turnarounds or independently and the system allows divers to be maintained at different working and decompression depths at the same time.

Divers under pressure can be evacuated by means of a hyperbariclifeboat positioned on the starboard side of the vessel. Facilities exist for air diving stations to be installed as required on the port side.



Dynamic positioning system

There is a fully redundant Kongsberg SDP 21 system with multiple independent reference systems. The vessel is able to keep position in up to 80 knot wind speeds and has a fully redundant power system.

The vessel is also fitted with a Kongsberg SDP 11 back-up system to meet Norwegian Marine Directorate (NMD) DP Class 3 rules.

DP Capability Plot



