



SUPER M2 – ELEVATING SUPPORT VESSEL (ESV)

The Super M2 elevating support vessel is a brand new design in offshore industry based on F&G Super M2 sound design. It is specially designed and built for large oil well operations, such as continuous tube drilling, oil well stimulation and small oil fields development. The Super M2 is a multi-purpose service vessel which can be used as a jack-up work over rig and support vessel. It has one main skidding crane (280mt capacity), and two 45-ton deck cranes on port side and starboard side, while its living quarters can accommodate 120 men with expansion to 200 men. And its maximum operation water depth is 91m (300ft).

GENERAL

Class : ABS
Notation : +A1, Self Elevating Unit, +AMS-NP, +DPS-1

PRINCIPAL DIMENSIONS

Length o.a. : 73.215m
Beam o.a. : 55.78m
Depth moulded : 7.62m
Transit Draught : 5.5 m
Hull Material : Welded Steel Construction, AH36
No. of legs : 3
Leg length : 128.946m
Spud can diameter : 15.24m
Spud can height : 4.572m

DESIGN ENVIRONMENT

Air Temperature : -10°C min. to 40°C ~max.
Humidity : 20% min. to 100%max.
Wind Survival Operations: 100kts
SW Temperature : 0°C min. to 32°C
Density : 1025 kg/m³ (For design purposes)
Corresponding wave period: 13.5sec
Wave Height : 15.24m (Survival, of the water depth 300ft);
16.46m (Survival, of the water depth 250ft)

CARGO CAPACITIES

Deck Load : 9000kips
Pipe rack : 540lbs/ft²
Main deck (outside pipe rack): 540lbs/ft²
Quarter's deck : 90lbs/ft²
House Tops : 150lbs/ft²
Machinery Spaces : 270lbs/ft²
Sack stores : 540lbs/ft²

MACHINERY/PROPULSION

Engine and Generators:
Main : 3 x GE 7FDM16, 2485kW, rated at 3500bHP, 4160V, 3ph, 900rpm 60Hz, with 3 remote mounted radiators.
Emergency : 1 x GE 7FDM8, 1240 kW, 4160V, 3ph, 900rpm, 60Hz
Thrusters : 3 x Steer-prop Azimuth Thrusters, SP35, Rated at Maximum ABS continuous rating 2500KW at 1200RPM.
Fuel Purifier : 250 GPH
Oily Water Sep : 44 GPM, US10000
Sewage Plant : 1 x 225 man capacity.
Ballast System : Computerized pneumatic control
FW Generator : 1 waste heat water-maker units (Alfa Laval), be each of a capacity of 8000GPD.
Air Compressors : 3 x IR for rig air, the air dryer will be provided with a separate skid base.

FIRE FIGHTING & SAFETY

Fire Fighting : 2 x pumps 91 m³/hr X0.701MPa
Life Boats : 2 x 120 person with davits
1 x Motor Rescue Boat (6 men) with davit
Life Rafts : 5 x 25 men

HELIDECK

1 x Heli-deck suitable for Sikorsky-S-92N helicopter

NAVIGATION EQUIPMENT

AIS : 1 x Furuno FA150
GPS : 1 x Furuno GPA-017S
DGPS : 1 x Furuno GP150D
Magnetic Compass : 1 x Cassens & Plath
Radar : 1 x X-band Furuno FAR-2127
1 x S-band Furuno FAR-2137S/12
Echo Sounder : 1 x Furuno FE-700
Navtex : 1 x Furuno NX700P
Speed Log : 1 x Furuno DS-80
Anemometer : 1 x RM Young Wind Tracker

COMMUNICATION EQUIPMENT

One (1) telephone exchange
One (1) public address system
One (1) sound powered telephone systems
Four (4) portable VHF transceivers
Four (4) portable Motorola UHF transceivers
Three (3) fixed radios for Navi. bridge and control room.
Three (3) Wave-Net Interface Module for local net of computers
Two (2) INMARSAT C Furuno Felcom 15
One (1) INMARSAT F Sailor Fleet 77

DP SYSTEM

DP-1 system supplied by L-3.

ACCOMMODATION

The accommodation and mess facilities are fit for 120 persons. The accommodation shall follow the guidelines for UK HSE regulations and be able to house 120 men in 4-man cabins (Have Approached Flag state for release).

REFRIGERATED STORAGE CAPACITY

Cold store : 1 x 15 m³ walk in Freezer
Chiller : 1 x 15 m³ walk in Chiller room
Provisions : 1 x 30 m³ walk in Provisions room

DECK MACHINERY

Main Deck Crane : 2 x Slewing Crane (Each with capacity of Fixed lifting 45T@36.6m & Slewing 7T @ 39 m)
4 Point Moor System : 4 x Single Drum winches, Brake Hold 60T, first layer
Anchors : 4 x anchors, 7T ea
Towing : Tow Brackets 320T MBL
Tugger Winches : Pull Load 30 T at 4.5m/min, 14T at 9m/min Drum capacity 750m x Ø 38 mm SWR@12 layers

