



KREUZ DP2 MSV NEW BUILD

Multipurpose Subsea Dive Support & Construction Vessel

The vessel is a DP 2 Multipurpose Subsea Dive Support & Construction Vessel/SPS Code 2008, with an 18-man twin bell saturation system for depth down to 300 meters. The vessel is equipped with diesel electric frequency controlled propulsion, highly efficient azimuth thrusters, dynamic positioning systems, offshore cranes and a large platform deck for construction duties. MT6024 is a model tested and optimized hull design with excellent characteristics for deployment worldwide.

MT DESIGN IS KNOWN FOR:

Excellent speed and seakeeping properties, environment-friendly ships, reduced fuel consumption, reduced exhaust emission, high safety level, low sound and vibration level.

The vessel is designed according to the class notation "Clean Design" and SPS Code and high focus is given to low fuel consumption, which reduces emission to the environment. FO tank arrangement according to "Clean Design" and MARPOL - oil fuel tank protection.

The vessel is designed to fulfill following duties:
Diving operations with a 18-man SAT dive system rated at 300 msw, ROV and seabed construction work.

The vessel is a DP 2 Multipurpose Diving Support Vessel available for deployment worldwide.

TECHNICAL SPECIFICATIONS

DIMENSIONS & CAPACITIES

Length o.a.	120,80 m
Length b.p.p.	112,85 m
Breadth mld	25,00 m
Depth main deck	10,20 m
Depth shelter deck	13,05 m

Max. draft swl	7,70 m
Work deck area	1300 m ²
Deck strength	10 t/m ² removable bulwarks each sides
ROV deck (Forec. deck):	240 m ² @ 6.5 t/m ²
Bridge deck	250 m ² @ 1.0 t/m ²
Fresh water	1500 m ³
Fuel oil	2100 m ³
Water Ballast	6000 m ³
Gross tonnage	11100 t
Net tonnage	3400 t
Deadweight approx:	7000 t

CLASSIFICATION

Det Norske Veritas, +1A1, SPS, SF-EQ, Dynpos AUTR, DK (+), HELDK-SH, COMF-V(3), Clean, DSV-SAT, Crane.

MAIN MACHINERY & THRUSTERS

Main generators:	5 x 2851 ekW = 14255 ekW
Harbour generator:	1 x 910 ekW
Emergency gen.	1 x 910 ekW (for ship/dive system)
Bow tunnel thruster:	2 x 1930 kW
Bow Azimuth thruster (retractable):	1 x 1500 kW
Stern Azimuth thruster:	2 x 3500 kW

MAIN DECK MACHINERY

Main crane:
1 off 140 t @ 12 m working radius (25 t @ 35 m working radius) AHC with wire capacity down to 3000 m water depth.

Auxiliary crane:
1 off 40 t @ 13.5 m working radius with wire capacity down to 150m lifting height (4 falls). (20t with 2 falls and lifting height 300m. 10 t with 1 fall and lifting height 600m).

Provision crane:
1 off foldable crane, 1 t at 17 m radius.

Tugger winches:
4 off Air driven, 5 t hosting capacity/7.5 t brake.

PERFORM CAPACITY

Maximum speed approx:	15 knots
Normal transit speed:	12-14 knots
Fuel capacity:	approx. 90 days duration
Diving gas capacity:	approx. 60 days duration

CONSUMPTION

Speed 16 kn:	31 t/day
Econ transit 12 kn:	18 t/day
DP operations:	7 t/day
Port:	1 t/day

ACCOMMODATION

Total no. of persons	130 with full A/C and TV/Satellite service in all cabins
1-man cabins:	28
2-man cabins:	51
Mess room:	56 seats for crew + 16 seats for officers
Tween deck:	Diving workshop, el. diving workshop, switchboard room, diving store.
Main deck:	Paint store, diver suit dry, diver suit wash, SAT control room, diving store/workshop, saturation room, oxygen clean room/helmet service, wardrobe, locker room, coffee lounge, hospital, ward, store laundry, engine control room, el. workshop, gymnasium, linen, bonded store, store, medic rest room.
Shelter deck:	ROV Control room, dive control room, reception, provision; dry, cool, freeze, galley, bakery, scullery, restroom for galley, personell, mess room crew and officers, 2 of day-room, TV room, internet cafe, conference room.
Forecastle deck:	Gymnasium, instrument room, cabins.
Boat deck:	Linen, laundry, cabins.
Captain deck:	Senior client office, clients office, project office, field engineers office, conference room, O.I.M. office, survey-office, coffee shop, office/conference room-ship, lounge, instrument room, officer cabins.
Bridge deck/Top of wheelhouse	3 office area/sky lobby, reception, TV room.

WORKSHOPS & SERVICES

Engine workshop, dirty/ship's el. workshop, thruster room workshop, diving work shop (electrical & mechanical), ROV workshops (electrical & mechanical), sheltered store, laundry room, incinerator room, compactor, food waste machinate, cargo hold c/w hydraulic operated load bearing deck hatch (2.3 x 3.3m), paint store, deck store.

MOON POOLS & CARGO HOLDS

Moon Pool dive:	2 x moon pool for twin bell SAT dive system, 3.9 x 3.9 m with damping zones.
Moon Pool constr. :	1 x moon pool for construction work, 5 m x 5 m
Cargo hold:	2 x 110 m2 Lower aft Cargo hold on tank top and tween deck.

DIVE SYSTEM

Twin 3 men bell saturation system, for depth down to 300 m.
18-men saturation system with 3 main 6-6-6 men chambers.

HELIDECK

Construction:	22.2 m diameter, aluminum pancake for Sikorsky S-92.
Load Capacity:	For Sikorsky S-92/S61N, to comply with Class HELDK-SH, IMO regulations and UK Civil Aviation Authorities CAP 437.

ROV'S

1 of work class ROV to be arranged on Dive Area 2nd deck (Forecastle deck + 1150 mm) One [1] medium sized observation class ROV.

DYNAMIC POSITIONING SYSTEM

DNV DYNPOS AUTR, DP2, with reference system:
3 x DGPS, 2 x HiPAP, 2 x taut wire Mk 15 w/ 500 m line.

NAVIGATION EQUIPMENT

Fully equipped according to Class and Authorities; radar plant, navigation/direction finder, survey gyro, current meter.

COMMUNICATION SYSTEMS

Fully equipped according to Class and Authorities; GMDSS A3 radio station, lifeboat transmitters/emergency equipment, VHF & UHF, digital communication, navigation/video screen, intercom/tel/PA system SPT, Loudhailer system, CCTV system, VSAT C band, internet.

CONTROL ROOMS

Engine control room, ROV & data control room, SAT control room, dive control room.

ROLL REDUCTION SYSTEM

2 of passive roll reduction tanks arr. in aft body.

LIFE SAVING APPLIANCES

Davit launched lifeboat:	2 of 65 persons life boat acc. the SPS rule requirements (SPS 2008)
Life Rafts:	According to regulations. ME system; capacity 2 x 65 persons
Hyperbaric life boat:	2 of 18 pers. capacity.

AVAILABLE DECK SERVICE

Fresh/technical water, compressed air, hydraulics with a CHPP (central hydraulic power pack) for running of aux machinery/deck equipment/project based deck equipment, electrical power take offs, plug & play communication, seawater cooling for ROV's and other project deck equipment in ring main system, protected by bumper bars etc.