



CONSTRUCTION/CLASSIFICATION

Type/design	DP2 MT6022XL
Built by	Hanjin Heavy Industries - Pusan, South Korea
Year of construction	2011
Flag	Marshall Islands
Classification	DNV ✱ 1A1, CLEAN, CRANE, DSV-SAT, DSV-SURFACE, DYNPOS-AUTR, EO, FIRE FIGHTER II, HELDK-SH, COMF V(3), DK(+), SF
IMO number	9441233
ISM/ISPS	Vessel is ISM & ISPS certified by ABS on behalf of Marshall Islands Flag

FEATURES

State-of-the-art 18-man Twinbell saturation diving system
Main crane 140 t active heave compensated
Dive system: 18-man, twin bell saturation diving, system rated to 300 m
2x 18-man hyperbaric lifeboats
2x DDC & 2x LARS for surface diving
Accommodation for 120 persons
Main deck area 1,120 m ² with 10 t/m ²
Schilling HD WROV system

MAIN DATA

Length overall	115.40 m
Length BPP	107.40 m
Beam	22.20 m
Depth main deck	9.00 m
Depth shelter deck	11.80 m
Draft max. (S.l.d)	7.035 m
Displacement	12,565 t @ 0.0 m trim
Deadweight	5,662 t @ 0.0 m trim
Gross tonnage	8,691 t
Net tonnage	2,608 t
Cargo main deck space	1,120 m ² (deck strength 10 t/m ²)
Forecastle deck space	235 m ² (deck strength 6.5 t/m ²)
Deck load capacity	3,300 t
Fuel oil	1,440 m ³
Lube oil	53 m ³
Potable water	1,160 m ³ + 50 m ³ /day water makers
Ballast water	5,122 m ³
Anti-heeling	940 m ³

SATURATION & AIR DIVING SYSTEMS

SATURATION EQUIPMENT SPREAD

Drass Galeazzi 18-man twin bell system rated at 300 msw

2 x 3-man bells, each 6.0 m³

Bell handling system with active shock absorption system

Bell handling approved to launch in 4m Hs

2 x 6-man DDC (D/L) + 2 x 3-man DDC (D/L) (2,200 mm dia)

2 x SPHL - hyperbaric lifeboats (18 man capacity each)

2 x TUP chambers (for dive bell mating)

GAS STORAGE

18,000 m³ gas storage below deck, gas transfer, chamber & diver gas reclaim systems

AIR DIVING SPREAD

2 x DDC (D/L) and 2 x 2-man LARS Air Dive System

DYNAMIC POSITIONING SYSTEM

Converteam ADP-21, dual redundant dynamic positioning system (AUTR/DPII) with DP references as follows:

1 x DGPS/GLONASS system comprising, 2 x VERIPOS LHD@-CGG2 integrated mobile unit for L1/L2 dual frequency GPS and GLONASS capability and integrated L-Band satellite and IALA/HF differential modulators

2 x DGPS C-NAV

1 x CYSCAN laser reference system (heated version)

3 x motion reference sensors TSS DMS-10

2 x taut wire MK15 – NTD A-Frame 500 m wire length

3 x Anemometer (with heating) Gill Wind Observer II
Hydro-acoustic USBL Ranger Pro (4,500 m capacity)

3 x Ship's wideband transponders type Sonardyne DPT 8124 (3,000 msw depth rating)

MACHINERY

Main generators 3 x 2,510ekW, 690V/60Hz, 720 rpm

2 x 1,880ekW, 690V/60Hz, 720 rpm

Auxiliary generators 2 x 835ekW, 690V/60Hz, 1,200 rpm

Emergency generator 1 x 910ekW, 1,800 rpm

Bow thrusters Wartsila, 2 x 1,900 kW tunnel thrusters

Bow azimuth Wartsila, 1 x 1,500 kW retractable thruster

Stern thrusters Wartsila, 2 x 3,000 kW azimuth thrusters

DA VINCI DIVE SUPPORT VESSEL

FUEL CONSUMPTION

At full speed 14 knots 25 t MGO/day

Cruising speed 11 knots 18 t MGO/day

In DP mode 10 -12 t MGO/day
(depending on weather)

At sea standby engines 5 t MGO/day (at calm sea)

In port or at anchors 3 t MGO/day (domestic use only)

MAIN CRANE (STBD)

TTS Marine 140 t crane type CCLKO 1600-140-35 - Active Heave Compensation (AHC) knuckle boom offshore crane. Wire dia 56 mm.

Main winch - dynamic factor 1.3

140 t – 2 fall 5.5 to 7 m radius - hook depth 650 m

70 t – 1 fall 5.5 to 10 m radius - hook depth 2,000 m

12 t – 1 or 2 fall at max radius 35 m - hook depth 2,000 m

Auxiliary winch - dynamic factor 1.54

10 t – 1 fall 5.5 to 33 m radius - hook depth 150 m

Personnel lifts 0.75 t at radius 5.5 to 33 m

AUXILIARY CRANE (PORT)

TTS Marine 40 t crane type CCLO 1250-40-27. Wire dia 28 mm.

Main winch - dynamic factor 1.3

40 t – 4 fall 5.5 to 13.5 m radius - hook depth 150 m

20 t – 2 fall 5.5 to 27 m radius - hook depth 300 m

10 t – 1 fall 5.5 to 27 m radius - hook depth 600 m

Auxiliary winch - dynamic factor 1.54

3 t – 1 fall 5.5 to 27.8 m radius - hook depth 50 m

Personnel lifts 0.5 t at radius 5.5 to 27.8 m

HELI DECK

Construction 22.2 m diameter aluminium

Load capability Sikorsky S92 - max take-off weight 12 t
Sikorsky S61 - max take-off weight 9.3 t

Compliances DNV HELDK-SH, IMO regulations, CAP 437

Sky lobby Allocated for in/out going passengers

FIRE FIGHTING

Class	DNV FIFI II
Pumps	2 x 3,600 m ³ /hr driven by 2,200kW electric motor
Monitors (stern)	2 x water monitors of 150 m length throw, 110 m height, working arc of more than 330 degrees

PERFORMANCE CAPACITIES

Fuel autonomy	About 90 days (based on average use of 11 t per day)
Diving gas autonomy	About 60 days (based on 18,000 m ³ storage capacity) 3,000 m ³ kept for safety and 200 m ³ use per day depending water depth.
Drinking water autonomy	Self-sufficient (based on onboard water makers 2pcs x 40 t, production capacity 40 t/day - 1pc in use at a time)
Station keeping	ERN 99.99.99

ACCOMMODATION & RECREATIONAL FACILITIES

Total of 120 persons	Full A/C in all cabins, mess rooms, control rooms and offices 23 x 1-man cabins 46 x 2-men cabins 2 x (2+2)-men cabin (Pullman) 123 beds in total
Hospital	4 beds

RECREATIONAL FACILITIES

Exercise room	21.5 m ² gymnasium
Mess rooms (2)	16 seats (officers) and 50 seats (others)
Day rooms (2)	16 seats (officers) and 20 seats (others)
Cinema/training room (1)	30 seats
Internet café (1)	6 seats and 6 stations

OFFICES & MEETING ROOMS

Main meeting room	10 seats (close to crew day room)
Project meeting room	12 seats (close to project offices)
Client's offices	3 offices with 2 stations available, 2 x PC, 1 x fixed VHF, 1 x clearcom
Offshore Manager Office	1 office with 1 station
Div. Supt/ROV Supt Office	1 office with 2 stations
Project Engineering Office	1 office with 6 stations
Field Engineers Office	1 office with 4 stations
On Line Survey room	1 office with 5 stations
Ship's office	1 office including lounge and conference table

MOONPOOLS
BELL

2 x (3.9 m x 3.9 m) aerated

WORKING

1x (5 m x 5 m) clear space, excluding baffles. A 2,500 mm perimeter area around the working moon pool strengthened with additional 25 mm plate for equipment handling or work structure installation

NAVIGATION EQUIPMENT
RADAR PLANT

1 x ARPA, Furuno FCR-2837S chart 10 cm/S band

1 x ARPA, Furuno FAR-2117 3 cm/X band

NAVIGATION/DIRECTION FINDER

1 x NMEA distribution unit

2 x GPS Furuno GP-150

1 x AIS type Furuno Universal AIS FA-150

1 x ECDIS type Simrad w/interface to radars, DGPS, Echo Sounder, AIS System, gyro

GYRO PLANT/AUTOPILOT

3 x gyro compass, Sperry Marine model Navigate MK1

COMPASS

2 x bearing compass with brackets

1 x magnetic compass with digital repeater

1 x autopilot, Sperry model Navi Pilot 4000

ECHO SOUNDER & SPEED LOG

1 x echo sounder, Furuno FE 700 (colour)

POSITIONING

EIVA positioning software

POSITIONING/VIDEO MONITORS

Cabling to posit/video monitors in key personnel/client's cabins as well as bridge, dive, ROV and project and client's offices

COMMUNICATION EQUIPMENT

GMDSS A3 RADIO STATION

1 x satellite V-system w/interface to email system

1 x MF/HF 150W simplex radio station

2 x Inmarsat C

1 x Inmarsat F77

1 x receiver type Furuno Navtex 500

VHF & UHF

2 x duplex VHF stations w/DSC and multi watch, type Sailor RT4822, one with slave handset in hospital

2 x simplex VHF station w/dual watch, slave handset in ECR

3 x UHF type Motorola GM380

3 x UHF radio, stationary model type GP950

1 x GSM radio w/line interface and antenna

DIGITAL COMMUNICATION

V-Sat with internet (WiFi, LAN Connection). High speed data transfer and desktop terminal w/17" flat screen monitor

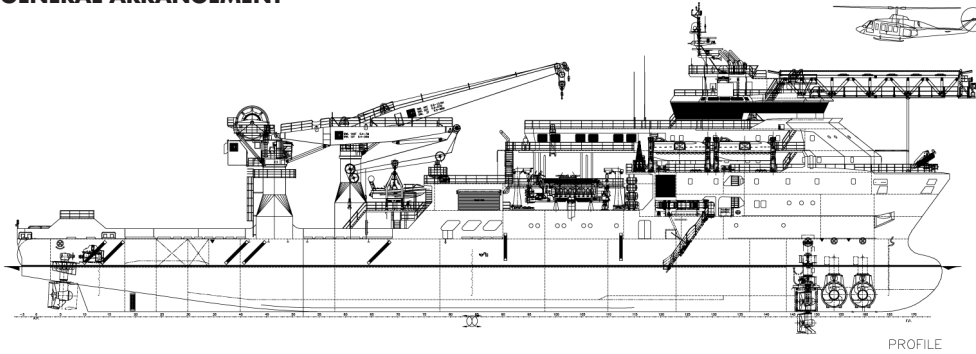
NAVIGATION / VIDEO SCREEN

Digital video network sharing w/10 multiple audio/video channels

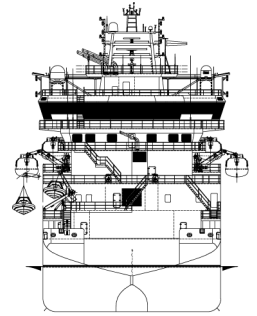
CCTV SYSTEM

Consists of 11 cameras, main station allocated in instrument room

GENERAL ARRANGEMENT

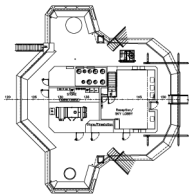


PROFILE

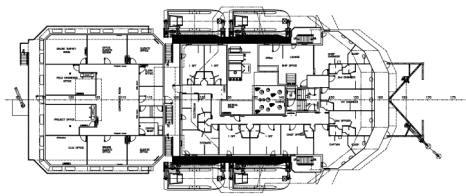


AFT VIEW

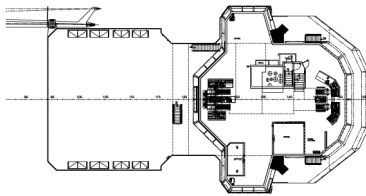
SIDE VIEW



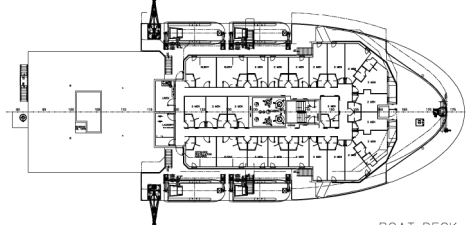
TOP OF WHEELHOUSE



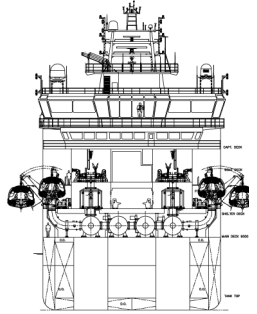
CAPT. DECK



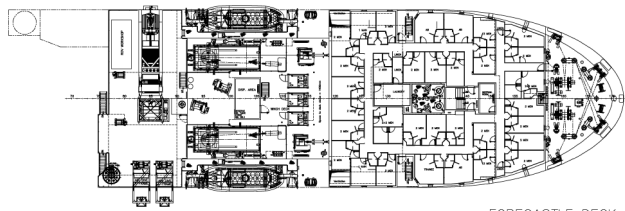
BRIDGE DECK



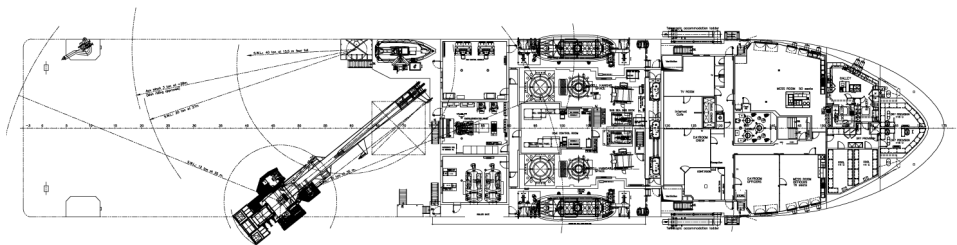
BOAT DECK



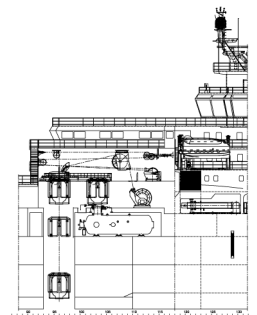
TRANSVERSE SECTION
SATURATION SYSTEM



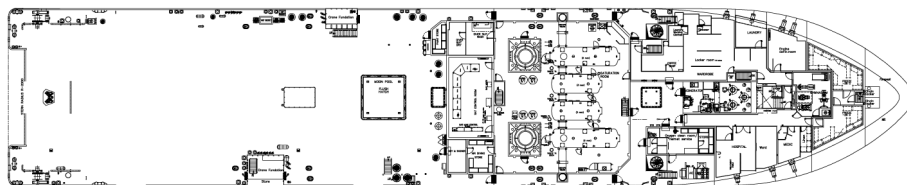
FORECASTLE DECK



SHELTER DECK



LONGITUDINAL SECTION
SATURATION SYSTEM



MAIN DECK

TOP VIEW DECK LEVEL