

SapuraAcergy March | 2009

## SAPURA 3000

DP Heavy Lift and  
Pipelay Vessel



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**SapuraAcergy Sdn Bhd, a joint venture between SapuraCrest Petroleum and Acergy, owns and operates the *Sapura 3000*, the leading DP heavy lift and pipelay vessel dedicated to the Asia Pacific.**

The vessel is multifunctional, with the ability to lay pipe in both shallow and deep water as well as install large subsea structures and perform other subsea construction related works.

The *Sapura 3000*'s capabilities include; conventional S-Lay for shallow water and steep S-Lay and J-Lay for deep water pipelay, a 3000 ST mast crane for heavy lifting, large work deck area for storage of pipe and subsea hardware, dynamic positioning and 2 x modern ROVs.

The *Sapura 3000* is designed to be the most advanced deep water construction ship in the growing Asia Pacific market.

# Sapura 3000 specifications

## Main Particulars

Length between perpendiculars: 151.2 m  
Breadth moulded: 37.8 m  
Depth to work deck, moulded: 15.0 m  
Depth to freeboard deck, moulded: 9.1 m  
Draft, maximum loaded: 6.5 m  
Classification: ✱ A1 (E) AMS DPS-2 heavy lift / pipe laying vessel  
Helideck: Suitable for Sikorsky S61N  
Accommodation capacity: 330  
Transit speed: 8-10 knots (finalisation on speed trial)  
Deck load capacity, work deck: 10MT/m<sup>2</sup>  
Free deck area: 2000 m<sup>2</sup>

## Accommodation

All cabins have integrated toilet facilities equipped with vacuum system  
10 x 1-person cabins  
50 x 2-person cabins  
55 x 4-person cabins

Fully air-conditioned accommodation equipped with offices for clients, conference room, recreation rooms, gymnasium, video rooms, helicopter arrival/departure room, prayer room etc

## Power Generation

Main diesel generators: 6 x 4000 kW  
Emergency diesel generator: 1 x 1000kW

## Propulsion & Dynamic Positioning

Non-retractable azimuth thrusters (stern): 2 x 2400 kW  
Retractable azimuth thrusters: 5 x 2400kW  
Kongsberg SDP22 CLASS II system

## Auxiliary Equipment

Water makers: 2 x 60T/day capacity  
Sewage treatment system: Suitable for full complement  
Oily water separator

## Safety Equipment

Lifeboat: 4 x 85 persons capacity  
Life raft: 100% capacity

- Sprinkler system in accommodation
- Fire detection system in accommodation and machinery spaces
- Water mist system in engine room
- CO<sub>2</sub> fire fighting system
- Foam system for helideck

## Telecommunication Equipment

VSAT with 256 kbps data link  
GMDSS  
Capsat Fleet 77

## Heavy Lift Capability

Heavy lift mast crane:  
Capacity, main hoist ( $\pm 25^\circ$  over stern): 3000 S.T at 27m radius  
Capacity, main hoist revolving: 2200 S.T at 31m radius  
Capacity, auxiliary hoist: 800 S.T at 53m radius  
Capacity, whip hoist: 200 S.T at 91m radius

- Whip hoist is suitable for 2000m of hook travel in single part reeving.
- Whip hoist and auxiliary hoist can be reeved together to achieve subsea lifting capability of approx 300 S.T for 1000m hook travel or approx 700 S.T for 500m of hook travel.
- Whip hoist of main crane has manriding capabilities.

Anti-heeling system for crane operations:  
Dedicated pumps: 1 x 1600 cum/hr  
3 x 1200 cum/hr

## Subsea Structure Installation

Using main crane  
Using A&R winch via A-frame over port or starboard side

## Pipelay Capability

Pipe size: 6" to 36" diameter plus concrete coating  
No. of work stations: 10 stations total  
6 each welding stations + 2 each NDT/repair station + 1 each stations for corrosion coating/blasting + 1 each field joint coating

Centre-lay firing line S-lay system consisting of:

- Pipe handling cranes on the work deck
- Pipe storage on work deck
- Endo conveyor line to the bevelling station in work deck
- bevelling station with transverse conveyor and transfer vehicle on work deck
- Pipe elevator loader and elevator for transport of the pipe to the freeboard deck through pipe loading hatch
- Endo conveyor line for transport to the ready rack transverse chain conveyor on the freeboard deck
- Transverse chain conveyor and transfer vehicles on freeboard deck
- Line up station with seam rollers on freeboard deck
- Pipe support rollers in firing line on freeboard deck
- 3 each tensioners and A&R winch
- Movable work stations in firing line
- Stinger and stinger handling system
- Transfer vehicle for transport of rejected joints to the kick out endo conveyor line on freeboard deck and subsequent removal through kick out hatch by pipe handling crane

## Tensioners

3 x 80MT

## A&R Winch

Line pull, max: 360MT  
Wire capacity: 3000m of 109mm wire

## Pipe Davits

6 x 50MT capacity (Can be installed on port or starboard side)

## Stinger

Total length: 90m (adjustable geometry in three sections)  
Minimum overbend radius: 70m  
Maximum pipe departure angle: 87°  
Equipped with load cells, underwater cameras etc  
Stinger handling tackle capable of adjustment of the stinger from survival condition to the minimum over bend radius. Handling system is equipped with backup tackle. Stinger can be installed/removed using main crane

Pipe handling cranes: 1 each on port side & 1 each on stbd side

Capacity - 40 St at 29m radius  
Maximum outreach of 45m  
Both cranes certified of man riding  
Equipped with anti-collision system

## Optional Operations

J-Lay system:

- System is installed on starboard side when required
- Designed for rapid installation and removal with main crane
- Using 360MT A&R winch
- Pipe size up to 20" diameter
- Double joint installation
- Installation of SCRs and flowlines

# Hercules

Pipelay/Derrick Barge



Global Industries

## Hercules

[globalind.com](http://globalind.com)

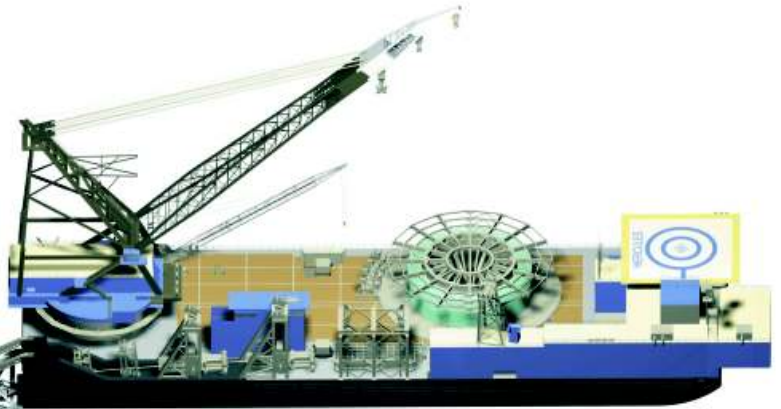




# VESSEL DATA SHEET

## DLB HERCULES

Conventional Pipelay, Reel Pipelay, 600 ST or 1,200 KIPS tension and Derrick lift capacity of 2000 ST makes the Global Hercules a unique and versatile vessel in offshore construction. The Global Hercules pipelay capability is designed to provide both Reel Pipelay & Conventional Pipelay. It is equipped with a removable horizontal reel, allowing the barge to be easily converted from Reel Lay to Conventional S-Lay. The 116' diameter reel has a capacity of 7000 ST of pipe from 4" to 18" diameter. In conventional lay mode the vessel can lay from 6" to 60" diameter pipe. With installed tension of 600 ST or 1,200 KIPS the Global Hercules can lay pipe in water depth up to 10,000 FSW.



## PIPELAY

Global Hercules can lay various types of pipelines including:

- Flowlines in deep & ultra- deepwater depths
- Pipe-In-Pipe insulated Flowlines in deep & ultra-deepwater depths
- Trunklines in shallow and intermediate water depths
- Steel Catenary Risers (SCR) and Hybrid Catenary Risers (HCR's) both Reel Lay & Conventional Lay
- Flexible Risers
- Umbilicals and Cables

## DERRICK

The Global Hercules main crane has a maximum lift capacity of 2000 ST, for platform installation, platform salvage, rig moves, and other heavy lift needs. In addition, Hercules' dynamic positioning allows the lifts to be completed quickly and in crowded field conditions.

### KEY FEATURES AND BENEFITS

The DLB Hercules is the most versatile construction vessel of its kind in the world. The vessel was designed with flexibility in mind - its configuration can be easily adapted to different project types, whether it be deepwater pipelay, shallow water trunklines, platform and topsides installation, or salvage and recovery projects.

The large tensioner capability enables pipelay ranging from small diameter pipe in deepwater to very large trunklines in shallow water. The tensioners are unique in that they can accommodate pipe sizes from 6" coated OD up to 60" coated OD. (Outside Diameter)

The same tensioners can be used for either reel lay or conventional S-Lay, both of which offer faster performance than J-Lay. The tensioners and the reel are interconnected by sophisticated control system software.

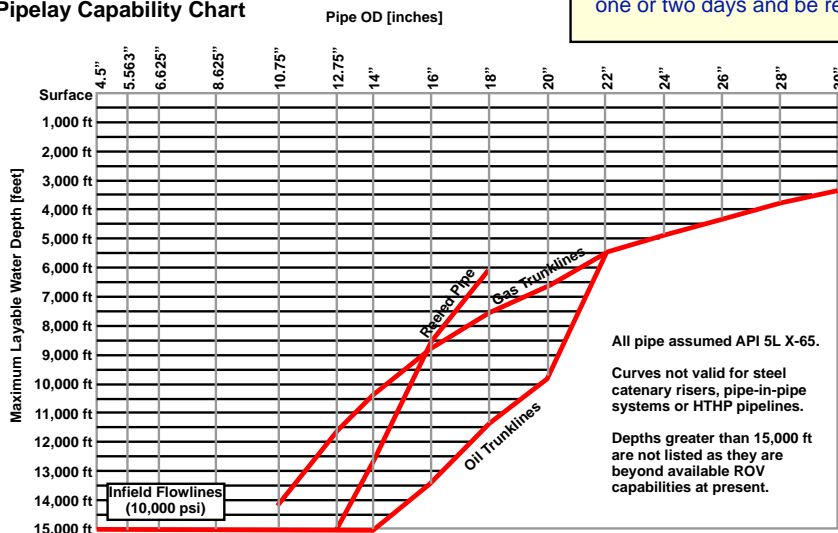
The reel system is a unique skid mounted reel that can be skidded on or off at the Carlyss Base depending on the type of project. The vessel can be reconfigured from reel lay mode to conventional S-Lay mode in a matter of one or two days and be ready for the next project.

The large derrick (2000 ton capacity) also enables heavy lifts, making it ideal for combination projects in most parts of the world.

The Hercules has one of the largest stingers in the world. The stinger is specially designed for "displacement controlled" pipelay, using strain based allowables, the only feasible method of S-Laying in deep and ultra deep water. When set to the deep water radius, the stinger has a 90 degree departure angle at the tip. For shallow water pipelay, the tail section is removable and the stinger can be set to a large overbend radius.

A powerful DP system allows for a high bottom tension capability as required for laying large trunklines in shallow water.

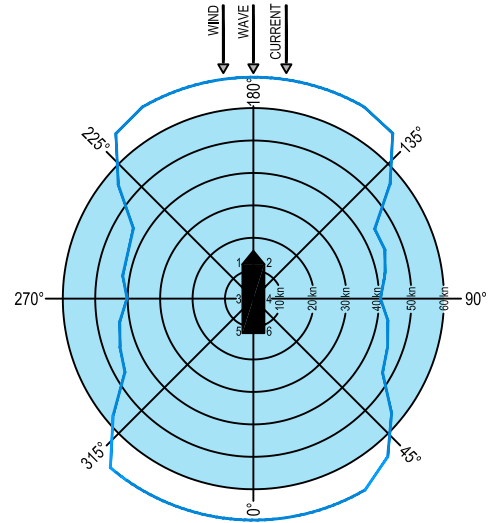
**DLB Hercules Pipelay Capability Chart**



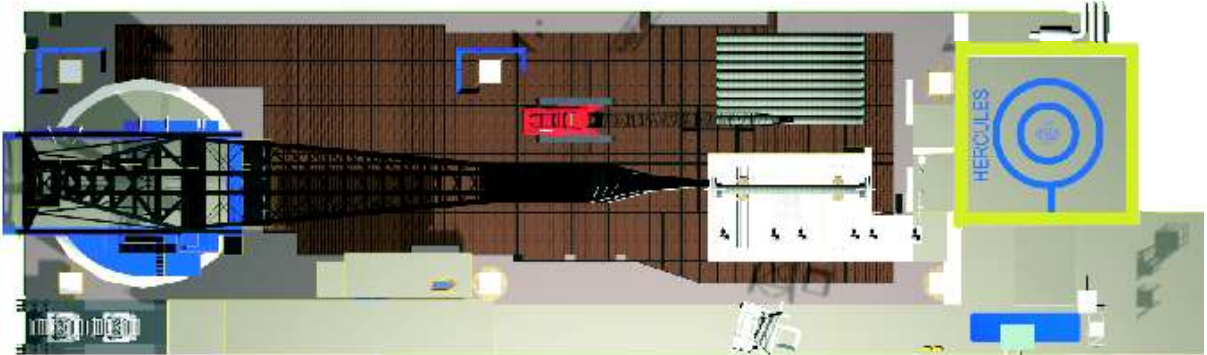
## STATION KEEPING

The Hercules is equipped with 6 retractable Azimuthing 3000HP (2237KW) thrusters for station keeping. The DP system is classed by the ABS as a DPS-2 system. The 15.6MW power system was designed to meet ABS DPS-3 requirements. The system has been tuned for optimal acceleration and deceleration times when in conventional pipelay mode. The Hercules DP system has been reliable, robust, and accurate in positioning the vessel for pipelay, heavy lift, and other offshore construction projects.

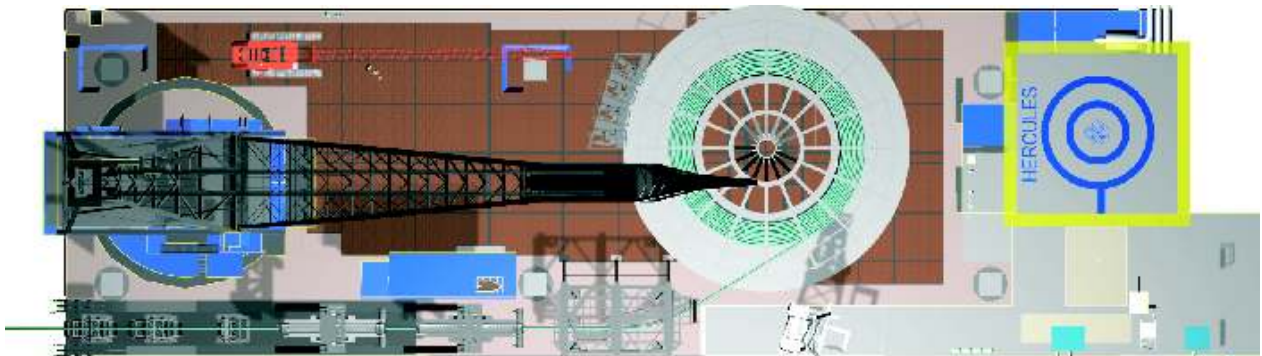
H1/3 [M]	Vw [kn]	Vc [kn]
1.8	10	1.00
3.2	20	1.00
5.1	30	1.00
7.3	40	1.00
>9.8	>50	1.00



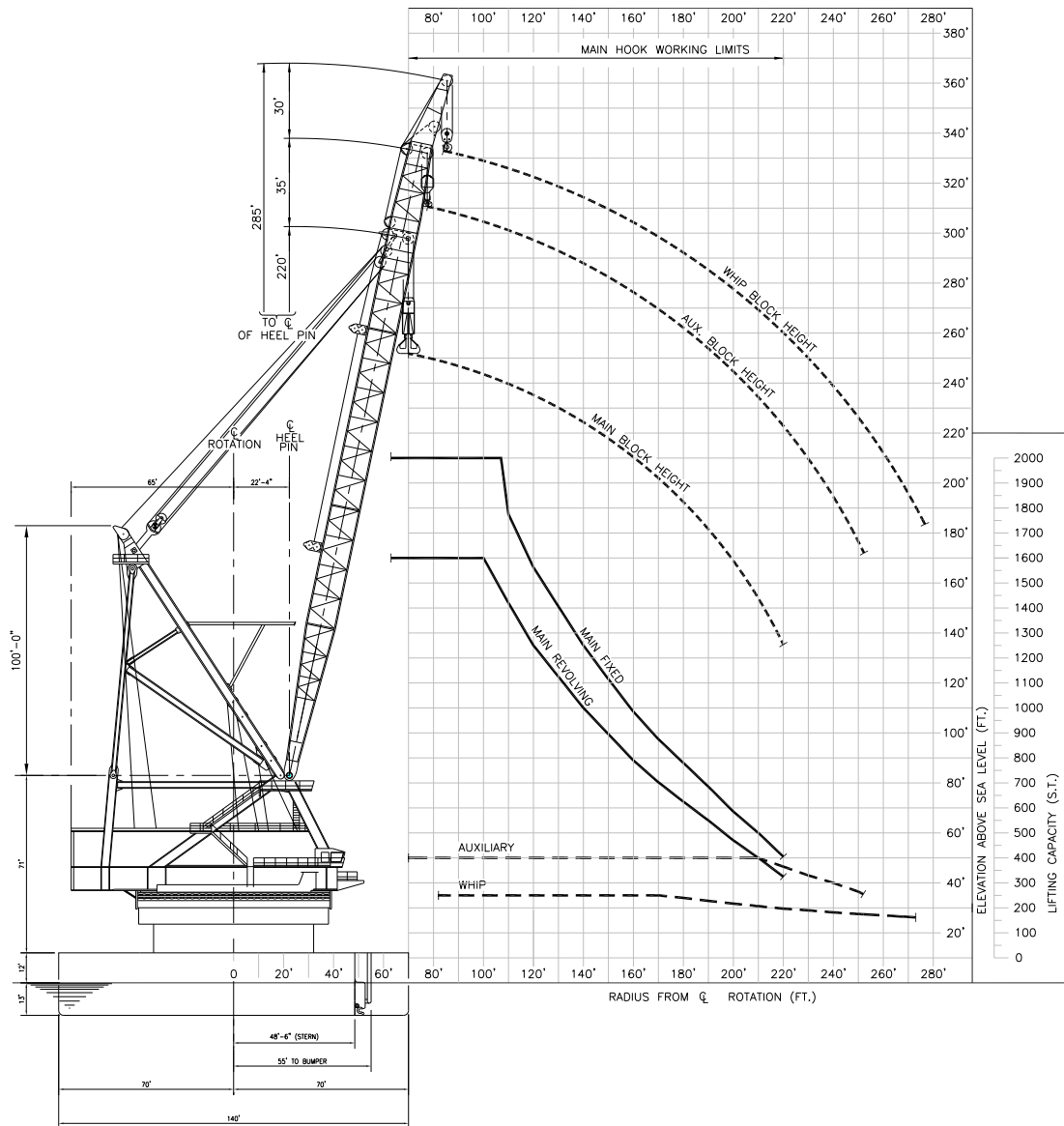
DP FOOTPRINT  
(1 kt. current)



CONVENTIONAL PIPELAY



REEL PIPELAY



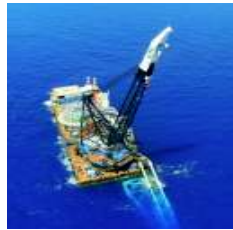
**HOOK RADIUS vs. LIFTING CAPACITY & HOOK HEIGHT**



# VESSEL DATA SHEET

# Hercules

*Pipelay  
Derrick  
Barge*



## GENERAL

Length (overall).....485.83 ft (148 m)  
 Width.....140 ft (42.67 m)  
 Depth.....25 ft (7.62 m)  
 Classification .....ABSA-1  
 Year Built.....1963  
 Registry (Flag).....Vanuatu  
 Operating Draft (min/max).....12 ft (3.66 m) / 18 ft (5.49 m)  
 Tonnage (gross / net).....18,588 / 5,576  
 Max Deck Load.....7,500 s. tons (6803.85 MT)  
 Free Deck Area (length x width) .....220 ft (67.06 m) x 110 ft (33.52 m)  
 Moon Pool (yes / no).....no  
 Accommodations.....269 people  
 Hospital Beds.....4  
 Transit Speed (econ / max) .....Towed  
 Helicopter Max Rating.....24,000 lbs (10,886.4 kg)  
 Helicopter Refueling Capacity.....N/A  
 Helideck Dimensions.....62 ft x 64 ft (18.9 m x 19.5 m)

## MACHINERY

Main Engines .....N/A  
 No. of Generators.....10  
 Main Power.....(6) 2,600 kW EMD  
 Auxiliary Power.....(3) 500 kW; (1) 315 kW emergency  
 No. of Compressors.....(2) 125 psi  
 Total Output.....1,200 cfm (2,038.8 m<sup>3</sup>/h)  
 Water Makers.....2  
 Total Capacity.....2,400 USG/h (9,084 L/h)

## BUNKER CAPACITY

Fuel.....660,000 USG (2,498,100 L)  
 Fresh Water.....500,000 USG (1,892,500 L)  
 Potable Water.....same tank as fresh water

## DYNAMIC POSITIONING

DP Class.....DPS-2  
 DP System.....Kongsberg Simrad SDP-21,  
 DPS 2 Fully automatic redundant system  
 Thrusters.....6  
 Type.....Azimuthing, Retractable  
 Power.....3000 hp DC ea  
 Total DP Power.....18,000 hp; 504 kips total thrust

## COMMUNICATION SYSTEMS

(8) Radios - Standard VHF; (1) Single side band 150 watt;  
 (1) Satellite - Anristu Sat. Com.; (1) Telecom / Data Sat. System - V-SAT  
 (1) Iridium Satellite Telecom / Data System; (2) Aircraft VHF Radio Syst.

## NAVIGATION

(1) Nav-Master Navigation / Charting Package;  
 (2) Radar; (2) GPS Systems

## MOORING EQUIPMENT

.....N/A

## MAIN CRANE

Derrick  
 Make, Model.....Clyde / 76-DE  
 Type.....Revolving  
 Boom Length  
 Main .....220 ft (67.06 m)  
 Auxiliary .....255 ft (77.72 m)  
 Whip .....285 ft (86.87 m)  
 Capacity  
 Main Revolving.....1,600 s. tons @ 100 ft (1,451 MT @ 30.48 m)  
 Main Fixed.....2,000 s. tons @ 107 ft (1,814 MT @ 32.61 m)  
 Auxiliary .....400 s. tons @ 210 ft (362 MT @ 64.01 m)  
 Whip.....200 s. tons w/ 4 part block @ 275 ft (181 MT @ 83.82 m)

## AUXILIARY CRANE(s)

Make, Model.....Manitowoc 4100 W  
 Type.....Crawler  
 Boom Length.....150 ft (45.72 m)  
 Capacity.....90 s. tons (81 MT)

## MISSION EQUIPMENT

Pipelay Method(s).....Conventional and Reel S-Lay  
 No. of Work Stations (@ 40 ft).....9  
 Pipe Diameter (min/max).....6 in / 60 in  
 Tensioners (make, type).....Norson Power Systems  
 Total Capacity (ea/ttl) ..600 kips (272,160 kg) / 1,200 kips ( 544,320 kg)  
 Reel Capacity (tonnage).....7,000 s. tons (6,350.26 MT)

Diameter (in)	Capacity (mi)	Capacity (km)
4.5	132	212.43
6.625	85	136.79
8.625	48	77.25
10.75	31	49.89
12.75	22	35.41
14	18	28.97
16	13	20.92
18	10	16.09

Abandon/Rec. Winch  
 Type (make, model).....Bezemer  
 AR Wire (length/diameter) .....5,500 ft (1,676.4 m) / 3.5 in  
 Capacity.....440,000 lbs (199,584 kg)  
 Davits.....N/A

## STINGER

Type.....Fixed Displacement - High Departure Angle  
 Length (min/max) .....200 ft (60.96 m) / 300 ft (91.44 m)

## PIPE BURY EQUIPMENT

.....N/A

## DIVING SYSTEM

.....N/A



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**Global 1200** Pipelay/Derrick Vessel



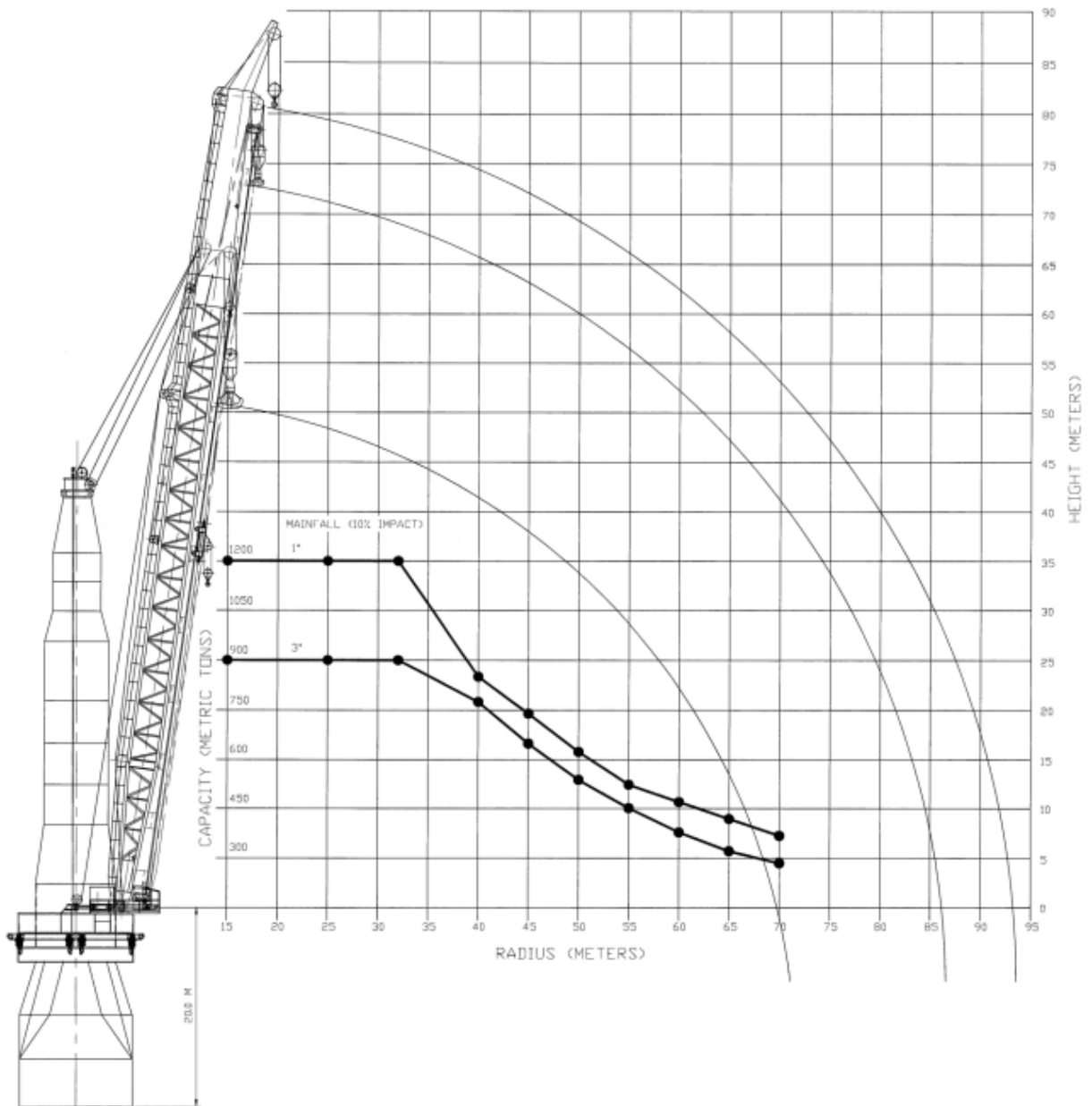
# Global 1200

[globalind.com](http://globalind.com)





# VESSEL DATA SHEET



The Global 1200 is a next generation multi-purpose DP-2 construction vessel designed for work in both deep and shallow water. The vessel incorporates a state-of-the-art pipelay system capable of operating up to 10,000 ft. (3,000 m) water depth and handling up to 60 in. concrete coated pipe. The vessel also incorporates a 1200 metric ton capacity crane suitable for conventional platform installations and a deep water lowering system also capable of operating up to 10,000 ft. (3,000 m) water depth.

The Global 1200, sized for passage through both Panama and Suez Canals, offers transit speeds up to 15 knots for swift and economic mobilizations to work destinations across the globe.

As a new build vessel, the Global 1200 provides the latest technology in DP systems/mission equipment along with high standards in living accommodations and represents Global's strong commitment to expanding its high quality fleet.

## Pipelay Derrick Vessel



### GENERAL

Length (overall)	532.5 ft (162.3 m)
Width	105.6 ft (32.2 m)
Depth (freeboard deck)	29.9 ft (9.1 m)
Classification	ABS A-1
Year Built	2010
Registry (Flag)	Vanuatu
Operating Draft (min/max)	19 ft (5.8 m) / 21.7 ft (6.6 m)
Tonnage (displacement / light)	25,000 / 18,000
Max Deck Load	(10 mt/m <sup>2</sup> )
Free Deck Area (length x width)	131.2 ft (40 m) x 65.6 ft (20 m)
Accommodations	264 people
Hospital Beds	2
Transit Speed	15 kts
Helicopter Max Rating	Sikorsky S61-N and Super Puma
Helideck Dimensions *octagon	75 ft (23 m) x 75 ft (23 m)

### MACHINERY

Main Engines	MAN
No. of Generators	7
Main Power	(3) 4409 kW; (3) 3919 kW
Auxiliary Power	(1) 1000 kW

### BUNKER CAPACITY

Fuel	594 usg x1k (2,250 lt x 1k)
Fresh Water	382 usg x1k (1,446 lt x 1k)
Potable Water	344 usg x1k (1,304 lt x 1k)

### DYNAMIC POSITIONING

DP Class	DPS-2
DP System	CONVERTEAM
Thrusters	Wartsila/LIPS
Type	(2) propulsion 4500 kW
	(5) retractable 2400 kW
	(1) tunnel 880 kW

### COMMUNICATION SYSTEMS

Telephone, VHF Radios, Satellite Phone,  
E-mail & Fax, Client Internet

### NAVIGATION

Gyro / dual axis doppler speed logs / auto-pilot / RPA Radars / DGPS

### MAIN CRANE

Derrick	
Make, Model	AmClyde / PC-37
Type	Revolving
Boom Length	
Main	220 ft (67 m)
Auxiliary	269 ft (82 m)
Whip	292 ft (89 m)
Capacity	
Main Revolving	992.1 s. tons @ 105.0 ft (900.0 MT @ 32.0 m)
Main Fixed	1322.8 s. tons @ 105.0 ft (1200.0 MT @ 32.0 m)
Auxiliary	385.8 s. tons @ 196.9 ft (350.0 MT @ 60.0 m)
Whip	66.1 s. tons @ 292.0 ft (60.0 MT @ 89.0 m)

### PIPE HANDLING CRANE(s)

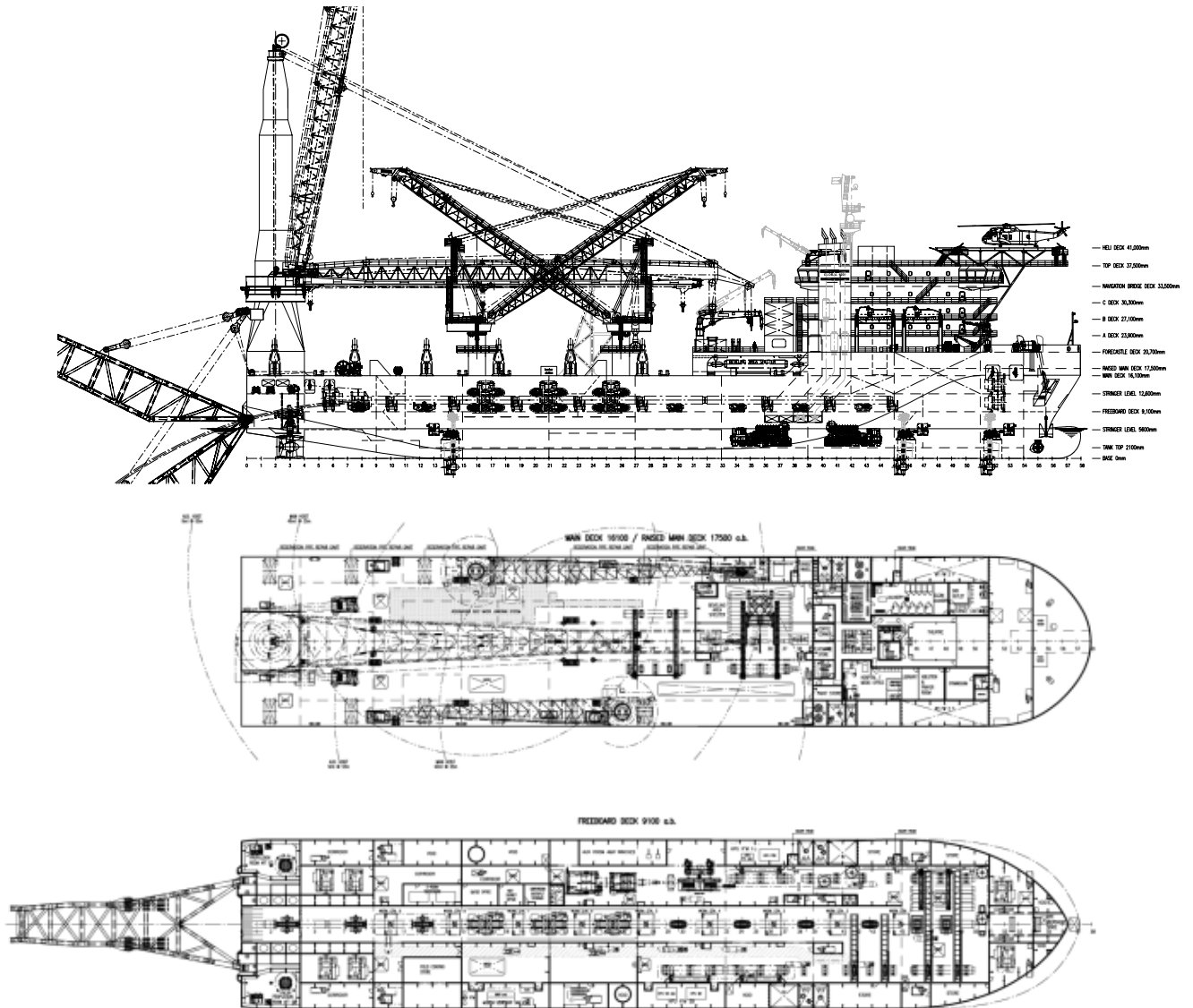
Derrick	
Make, Model	AmClyde / MSB-12
Type	Revolving
Boom Length	
Main (length/capacity)	164 ft (50m) / 40.0 MT @ 35 m
Aux (length/capacity)	177 ft (54m) / 9 MT @ 54 m

### MISSION EQUIPMENT

Pipelay Method(s)	S-Lay
No. of Work Stations	9
Pipe Diameter (min/max)	4 in / 60 in
Tensioners (3)	Remacut
Total Capacity (each/total)	125 MT / 375 MT
Abandon/Recovery Winch	
Type (make/model)	AmClyde Traction
Wire (length/diameter)	9842.5 ft (3000 m) / 4.3 in (108 mm)
Wire (length/diameter)	9842.5 ft (3000 m) / 2.5 in (64 mm)
Capacity	440.9 s. tons (400 mt)
Davits	
Type	Fixed/Portable
Number of Davits	6
Capacity	55. s. tons (50 MT)
Beach-pull Winches (8)	
wire (length/diameter)	9842.5 ft (3000 m) / 2.5 in (64 mm)

### STINGER

Type	Fixed, displacement controlled
Length	345.0 ft (105.2 m)



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# Offshore

Castoro Sei

# Castoro Sei Sei

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## CASTORO SEI SEMI SUBMERSIBLE PIPELAY VESSEL

The Castoro Sei provides a safe, reliable and stable operating platform capable of laying subsea pipelines up to 60 inches in diameter, with additional facilities for offshore construction works and flotel capability. Optional piggyback and dual-lay configurations ensure that the Castoro Sei is capable of installing complex infield pipeline systems in addition to major trunkline systems. The Castoro Sei has an extensive track record of sustained high productivity in both shallow and deep water conditions on major trunkline projects, together with an impressive list of infield projects.

## GENERAL

The semi-submersible hull construction with optional thruster assistance for enhanced position keeping enable operations to continue in adverse weather conditions.

The upper hull encloses the accommodation, main engine room and main store rooms. It is divided transversely by three watertight bulkheads. A large proportion of the main deck is used for pipe storage with a rotating gantry crane mounted on either side of the firing line.

The equipment and control systems onboard have been maintained to keep up with current technologies.



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#### CLASSIFICATION

The Castoro Sei is built in accordance with the rules of the Italian Marine Ministry and is classed  $\boxtimes$  A1 by the American Bureau of Shipping. The flag state is the Bahamas and the Port of Registration is Nassau. The Castoro Sei also holds a Letter of Compliance issued by the Norwegian Maritime Directorate.

#### FIRING LINE

The firing line comprises the fixed pipelay ramp, enclosed in the central housing, running along the longitudinal centreline of the vessel. It is connected to an internal and external ramp, both of which have adjustable inclination to facilitate pipelay in varying water depths. A ramp extension unit is available for use in deep water or for severe seabed conditions.

Located along the fixed and internal ramps are three 110 tonne tensioners, nine work stations (Welding, X-ray and Field Joint Coating) and a number of support rollers.



# Castoro Sei Sei







#### DOUBLE JOINT LINES

The pipe double-jointing system with six work stations is located in the deckhouse above the fixed ramp while the transfer and line-up station is enclosed within the superstructure at the stern.

#### POSITIONING

The vessel has a twelve point mooring system to facilitate accurate positioning and movement during operations with a fully redundant control and monitoring system. It also has four Azimuthal variable pitch thruster units which can be utilised for propulsion or to further enhance position keeping if required.

#### WELDING

A fully mechanised GMAW system known as "PASSO" is utilised for medium to large diameter pipe in the firing line whilst double joint line welding is accomplished using submerged arc equipment.

#### SUPERSTRUCTURE

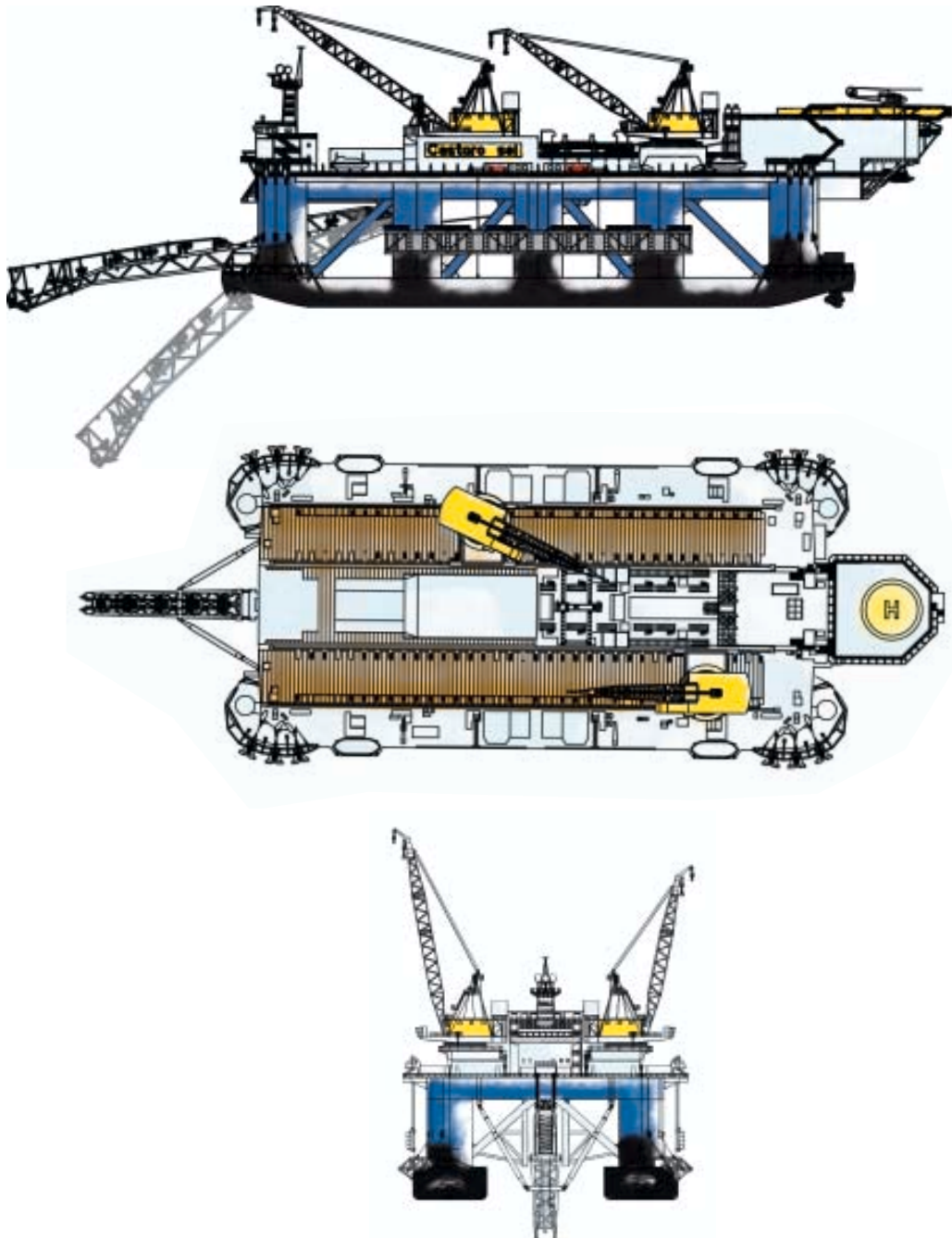
An aluminium helideck structure is located at the stern of the vessel. The helideck is designed to accommodate single main rotor helicopters up to and including the Sikorsky S61N type and is approved for use by the UK, Norwegian, Danish, German and Netherlands Civil Aviation Authorities.

Offices and stores are located on either side of the central housing at main deck level. A separate superstructure mounted at the bow of the vessel encloses the bridge, offices, computer room and radio room.



# Castoro Sei Sei

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#### HULL TYPE

Column stabilised semi-submersible

#### VESSEL FEATURES

Length overall excluding ramps	152.0 m
Breadth overall	70.5 m
Depth to main deck	29.8 m
Transit draft	9.5 m
Operating draft (typical)	14.0 m
Survival draft	12.5 m
Dedicated pipe storage space	1,195 sq.m
Additional deck space	1,525 sq.m
Deck load	3,600 tonnes

#### CLASSIFICATION

American Bureau of Shipping

#### COMPLIANCE

NMD, HSE

#### PROPULSION / POSITIONING SYSTEM

Four 37 tonne Azimuthal thrusters  
Twelve 25 tonne anchors  
Twelve 124 tonne anchor winches  
3,000 m anchor wire on each winch of 76 mm

#### PIPELAY EQUIPMENT

2 Rotating gantry cranes 134 tonnes capacity  
Longitudinal conveyor, gantry transfer conveyors, line-up station  
Three 110 tonne pipe tensioners  
Fixed ramp, articulated ramp, mini ramp extension  
Bevelling stations  
Double jointing system  
Welding stations utilising a semi automatic system  
X-ray or AUT equipped NDT stations  
Field joint coating system  
Abandonment & recovery winch (330 tonnes)  
Piggyback lay welding line facility  
Dual-lay welding line and ramp

#### HELIDECK

Suitable for helicopters up to and including the Sikorsky S61N type

#### NAVIGATION & COMMUNICATIONS

Fully equipped radio room GMDSS  
Satellite communications & TV  
2 ARPA radars  
GPS / DGPS navigation & positioning  
Echosounder

#### POWER GENERATION

6 Main generators	20.5 Mw total
1 Emergency generator	800 Kw

#### BUNKER CAPACITY

Ballast capacity	11,518 cu.m
Lube oil capacity	138 cu.m
Fuel oil capacity	3,123 cu.m
Potable water capacity	1,000 cu.m
Fresh water generators	180 tonnes / day

#### CREW FACILITIES

Accommodation for 330 people  
Client offices  
Conference rooms  
Hospital  
Gymnasium  
Galley mess room  
Coffee bar  
Cinema  
Recreation rooms  
Satellite television

# JASCON 18

DP-3 PIPELAY / CRANE / CONSTRUCTION VESSEL

[www.seatrucksgroup.com](http://www.seatrucksgroup.com)



The ship shaped Jascon 18 with its twin working decks is the flagship of the Sea Trucks Group's construction vessel fleet and an excellent example of the group's hybrid design philosophy. The vessel will be able to lay subsea pipelines from 4" flowlines to 48" trunklines, from very shallow to ultra deep water. With its clear main deck, high capacity crane, powerful DP3 system and large accommodation capacity the vessel is suitable to carry out almost every job in the offshore oilfields around the globe.

- Length 150.00 m
- Breadth 36.80 m
- Propulsion system: diesel-electric
- Total thrusters power 23,300 kW
- Class III DP system
- Clear deck area, approx: 1800 m<sup>2</sup>
- S-lay pipelay system below maindeck, 3 x 200 t tensioners, 120 m stinger
- 1600 t Main crane, heave compensated, with underwater capability
- 2 Auxiliary deck cranes
- Accommodation for up to 400 persons
- Moon pool 8.00 x 5.80 m at SB

# Specifications Jascon 18

DP-3 PIPELAY / CRANE / CONSTRUCTION VESSEL

www.seatrucksgroup.com

## GENERAL

- Classification: ABS, ✕ A1 (E), ✕ AMS, ✕ ACCU, ✕ DPS-3, CRC
- Flag: Gibraltar

## DIMENSIONS

- Length, overall: 150.00 m
- Breadth: 36.80 m
- Depth: 15.10 m
- Operating draft: 6.00 m

## MACHINERY

- Propulsion thruster system: diesel-electric
- Generator sets: 8 x 3580 kW each, 6.6 kV, 60 Hz, 3 phase, make EMD/Kato
- Emergency/Harbour generator set: 910 kW, 440 V, 60 Hz, 3 phase, make CAT

## THRUSTERS

- Stern thrusters: 2 x FPP azimuth, 3000 kW each
  - Aft thrusters:
    - 2 x FPP azimuth (retractable type), 2400 kW each,
    - 2 x FPP azimuth (retractable type), 1800 kW each
  - Forward thrusters: 3 x FPP azimuth (retractable type), 2400 kW each
  - Bow thruster: 1 x electrically driven, 1700 kW
- All thrusters make Rolls Royce

## MOORING SYSTEM

- Windlass: 2 x anchor windlasses
- Cargo barge mooring: 2 x constant tension mooring winches and 2 x electrically driven bollards

## POSITIONING SYSTEM DPS-3

- Kongsberg Simrad SDP22 on working/navigation bridge with SDP12 control station at DP back-up room
- Reference systems:
  - 1 x Radius 1000
  - 2 x DGPS receivers
  - 3 x Gyro compass
  - 3 x Motion reference units
  - 3 x Wind sensors
  - 1 x Hipap 500
  - 1 x Lightweight Tautwire

## PIPELAY EQUIPMENT

- Concept: central slot single joint S-lay system below main deck
- Capacity: 4" – 48" diameter pipe (60" including coating)
- Tensioners: 3 tensioners, 200 t each
- Workstations Firing Line: 5 welding stations, 1 NDE (X-ray or ultrasonic) / repair station, 1 coating station; all stations sheltered
- Workstations Piggy Back Line: 3 welding stations, 1 NDE repair station, all sheltered
- Davits (stored on board): 5 x with load cells, capacity 60 t each
- A & R system: 2 x SWL 300 t in Firing Line, up to 4000 m x 90 mm wire
- Stinger: length up to 120 m

## CRANES

- Main crane: Mast crane, 1600/1200 t revolving, under-water capacity 300 t @ 3000 m + heave compensated, make Huisman-Itrec
- Auxiliary deck crane: 2 x Pedestal type, 40 t @ 40 m make TTS

## ACCOMMODATION

- Fully air-conditioned permanent accommodation for up to 400 persons, in cabins all with individual bathroom facilities. Including conference room, offices, cinema, gymnasium, prayer room, recreation room, laundry as well as a medic room with hospital

## HELIDECK

- Suitable for Sikorsky S-92A Helibus

## ADDITIONAL DATA

- Clear deck area, approx: 1800 m<sup>2</sup>, loading capacity 10 t / m<sup>2</sup>
- Firefighting equipment: 2 x main fire pumps at 600 m<sup>3</sup>/hr each. On the helideck a fixed foam system with 3 monitors
- Sewage treatment: sewage treatment plant with nil over-board discharge
- Rescue boat: fast rescue boat with A-frame type Davit
- Life boats: 4 life boats (100 persons each)
- Moon pool 8.00 x 5.80 m at SB

## DELIVERY

- Mid 2010



saipem

# Offshore

Castoro 7

# Castoro 7

## *Semi-submersible lay barge*

Castoro 7 is one of the world's most efficient semi-submersible pipelay barges. As Piper, its former name, it has an outstanding worldwide track record of achievements including successful pipelay and trunkline operations in the North Sea, West Africa, Mediterranean Sea, Brazil and the Gulf of Mexico. Castoro 7 has the ability to lay pipe of 8 to 60" diameter with a fully automated welding system.

### **Classification**

13/3 (E) + BV.

Compliance with NMD

### **General specification**

Flag: Panama

Displacement: 53,447 t

High dimensions: 167.5 x 58.5 x 33.2 m

Minimum transit draft: 11.5 m

Working draft: 20 m

### **Storage capacity**

Pipe storage: 2,000 t

Total deck load: 4,050 t

### **Mooring system**

Mooring winches: 14

Total hoist capacity: 3,048 t

Mooring lines: 3" wire rope, 3,000 m

Anchors: Delta Flipper, 7 x 22.5 t & 7 x 20 t

### **Double joint facilities**

Double joint facilities are on each side of the barge, each with 2 beveling stations and fully automated welding systems. Also capable of receiving, in reverse, cut-out DJ's for re-prepping

### **Main production line**

Welding stations: automatic stations using automated Saipem Welding System

NDT and repair: AUT or X-Ray station

Field joint coating: available for main line and DJ welds coating

### **Pipeline tensioning**

Tensioners: 5 Western Gear linear pipe tensioners LPT-150 ST

Tension capacity: 340 t

### **Abandon & recovery system**

Main winch: 225 t, model 2162-402

Booster sheave: Kley France, model 464 T 1000K

Total pull: 340 t





#### **Stern ramp**

Ramp: 3 sections, tubular frame construction  
Total length: 120 x 6 m

#### **Deck handling equipment**

Work cranes: 4 x 54 t track mounted fully revolving gantry cranes

#### **Power generation system**

Main generators: 8 Wartsila 9L20C3 diesels, AEG 1,500 kW  
Auxiliary generators: 3 Caterpillar, 604 kW  
Emergency generator: 1 Caterpillar D399, 1,000 kVA

#### **Safety equipment**

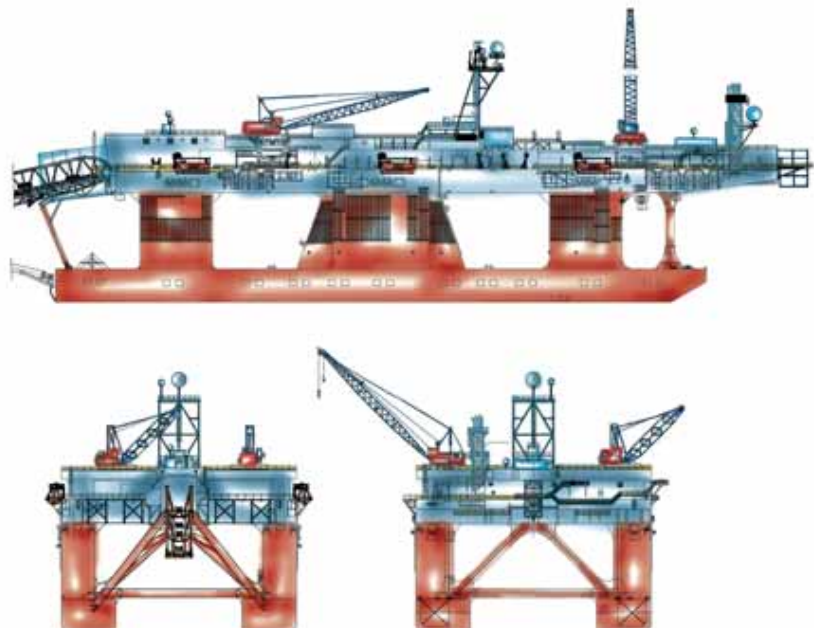
Lifeboats: 6 x 80 man lifeboats, 24 x 20 man liferafts, 1 x fast rescue boat  
FiFi and safety: all additional required equipment to satisfy BV, Panamanian and NMD rules

#### **Accommodation**

401 persons

#### **Helideck**

Designed to accommodate helicopters up to Sikorsky S61N & S92







Caesar







**NAVIGATIONAL AND COMMUNICATION EQUIPMENT**

Navigational Equipment.....  
 Gyro, Auto pilot, Echo sounder, DGPS, Satnav, radar (2)  
 X-band and S-band, VHF's Navigation;  
 Integrated bridge, direction finder, ECDIS  
 Communication Equipment..... TBD

**PIPELAY CAPABILITIES**

Pipeline Sizes .....6" - 36" steel OD,  
 max. OD 42" single joint, optional piggy back  
 Tensioners..... 3 x 135 t @ 30 m/min each,  
 total 405 t  
 A & R..... 1 x 450 t or 2 x 225 t  
 Work Stations..... 7 x welding, 1 x NDT (AUT),  
 1 x coating / strapping  
 Pipe Storage Capacity .....10,000 t  
 Stinger..... Fixed, 90 m max. length, adjustable radius  
 between 70 m and 300 m  
 Tail Anchor / Start-up 250 t winch with 25 t FD anchor (alt.  
 suction anchor)  
 J-mode structure installation.....A-frame 450 t

**SAFETY**

Helideck .....S-61 N, CAA, NMD approved  
 Lifeboats .....6 x 75 men equipped as per SOLAS require-  
 ments  
 Liferrafts .....as per SOLAS requirements  
 Fast Rescue Boat .....9 persons

**CONSUMPTION / ENDURANCE RANGE**

@ Max. Speed ..... 45 Tons / 55 Days  
 19,500 nautical miles  
 @ 13 Knots .....30 Tons / 80 Days  
 26,500 nautical miles  
 @ DP Average .....20 Tons / 120 Days  
 Average station keeping in  
 moderate weather environment



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