



VESSELS

Pipelay / Heavy Lift

Our Values



Safety



Integrity



Sustainability



Performance



Collaboration



Innovation

subsea 7



Seven Borealis

Vessel Info

Full specification overleaf

Seven Borealis is a pipelay and heavy lift vessel capable of operating in the world's harshest environments.

- Length 182m x breadth 46m
- 600t tension S-lay up to 46-inch pipe diameter
- 937t top tension J-lay system up to 24-inch pipe diameter
- 2,800t onboard pipe storage
- Mast crane: capacity main hoist 5,000t; 1,200t heave compensated aux hoist
- Accommodation for 399 persons
- 2x work-class ROVs
- SPS code compliant
- MODU certificate (for POB 260)

Fast Facts

- J-Lay tower with gimbaling function extending weather capability
- Proven track record in pipelay, subsea and surface construction, including the renewables sector
- Touch down monitoring capability by ROV at radius of 1,500m from the vessel
- Heave compensated auxiliary hoist with capacity of 1,200t, for use on surface or subsea
- S-lay system configurable for conventional, sliding and swaged Pipe-in-Pipe, with or without piggyback.



Seven Borealis

subsea 7

General Information

Type DNVGL Class Notation	Pipelay / Heavy Lift +1A1 CRANE VESSEL BIS CLEAN(DESIGN) DK(+) DYNPOS(AUTRO) EO HELDK(S, H) NAUT(AW) OPPF SPS and MODU code compliant C6YG8
Additional Compliance Call Sign	Bahamas 2012
Flag	
Built	

Principal Dimensions

Length Overall (m)	182.2m
Breadth (m)	46.2m
Depth Main Deck (m)	16.1m
Operating Draft (m)	8.5m to 11.35m

Main Deck

Clear Deck Area (m ²)	730m²
Deck Strength (t/m ²)	10t/m²
Pipe Deck Storage Capacity	2,800t

Tank Capacities (100%)

Marine Gas Oil (m ³)	2,980m³
Lubricating Oil (m ³)	92m³
Fresh Water (m ³)	2,620m³
Ballast Water (m ³)	41,076m³
Technical Water (m ³)	760m³

Power and Propulsion

Main Engines/Generators Type / Power (kW)	6 Rolls-Royce B32:40 V12A 720 rpm diesel engines / 5,760kW each
Emergency/Harbour Generator Type / Power (kW)	1 MTU, V12 4000 Series / 1,600kW
Thrusters for Propulsion and DP / Location Type / Power (kW)	2x azimuth thrusters / Stern Rolls-Royce UUC 455 FP, underwater demountable / 5,500kW each
Thrusters for DP Number	4x azimuth thrusters, vertically retractable
Type / Power (kW) / Location Location	Rolls-Royce UL 305 FP / 3,200kW 3 at bow, 1 at stern
Number	1x tunnel thruster
Type / Power (kW) / Location Location	Rolls-Royce TT 3,000 CP / 2,500kW Bow

Vessel Speeds and Fuel Consumption

Maximum Speed	10.5 knots
Economic Speed	8.0 knots
Economic Speed Fuel Consumption	75.5m³/day

DP Systems

DP Classification	K-POS DP Class III
Reference Systems	3x Gyros, 3x MRU, 4x wind sensors, 4x DGPS, 2x HiPAP, 1x Radius, 1x Taut Wire + interfaces for extra Taut Wire, 1x Fanbeam, 2x Seapath 320 1x SpotTrack

Pipelaying System

Rigid S-lay: Max Tension (t) Tensioners (No. and type)	600t dynamic 3x Huisman horizontal two track tensioners Variable speed electric drive motors 4.5 - 46 inches 2,800t Portside 11 single or 6 double joint stations 3 section stinger Stinger length 92.5m, radius 70 to 300m 20m - 3,000m 600t traction and 200t CT drum winches Steep S-lay system, up to 90 deg departure
Pipe Range (inches) Storage Capacity of Pipe (t) Work Stations (No.) Stinger (m)	4.5 - 46 inches 2,800t Portside 11 single or 6 double joint stations 3 section stinger Stinger length 92.5m, radius 70 to 300m 20m - 3,000m 600t traction and 200t CT drum winches Steep S-lay system, up to 90 deg departure
Operating Water Depth (m) A&R Capacity (t) S-lay Comments	600t dynamic 4-24 inch WS1 for welding/NDT, WS2 for NDT/ coating Double joint 3,000m 600t dynamic outside J-lay tower 360t dynamic inside J-lay tower 100t (within J-lay tower) Gimbal max angle 15°. Tower can handle pipe catenary using either friction clamps or collar clamps Portside provision for 1,000t hangoff Starboard side provision for 1,225t hangoff Provision for double joint fabrication onboard, dedicated double joint module or S-Lay mainline

Rigid J-lay: Max Tension (t) Pipe Range (inches) Work Stations (No.)	937t dynamic 4-24 inch WS1 for welding/NDT, WS2 for NDT/ coating Double joint 3,000m 600t dynamic outside J-lay tower 360t dynamic inside J-lay tower 100t (within J-lay tower) Gimbal max angle 15°. Tower can handle pipe catenary using either friction clamps or collar clamps Portside provision for 1,000t hangoff Starboard side provision for 1,225t hangoff Provision for double joint fabrication onboard, dedicated double joint module or S-Lay mainline
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Joint Type Operating Water Depth (m) A&R Capacity (t)	Double joint 3,000m 600t dynamic outside J-lay tower 360t dynamic inside J-lay tower 100t (within J-lay tower) Gimbal max angle 15°. Tower can handle pipe catenary using either friction clamps or collar clamps Portside provision for 1,000t hangoff Starboard side provision for 1,225t hangoff Provision for double joint fabrication onboard, dedicated double joint module or S-Lay mainline
PLET Handling capacity J-lay Comments	

Outriggers

Double Joint

Helideck

Type	Aluminium - Max D 22.2m, Max T.O.W. 12.8t. NMD compliant
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Cranes

Main Crane Capacity (mt) Location Manufacturer Dual Main Hoist, Revolving	5,000t (stability permitting) Main deck centreline aft Huisman Equipment BV 4,000t at 40m radius 1,500t at 78m radius
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Auxiliary Hoist (Subsea Hook)	1,200t at 70m radius, 4 falls 600t at 103m radius, 2 falls 6,000m - single fall
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Operating Water Depth (m) Active Heave Compensation Whip Line	Auxiliary hoist only Single fall: 55t at all radii Double fall: 110t at all radii
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Main Crane Tugger Winches	4x 45t pull. Constant tension up to 22t each
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Main Crane Comments	Two main blocks/hooks to allow jacket upending Three point lifts can be achieved using the two main blocks and the auxiliary block
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Auxiliary Cranes Capacity and Location	40t Dreggen knuckle boom on starboard side 40t Dreggen knuckle boom on port side Aft 36t Huisman PMOC on port side Fwd
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ROV System

ROVs (No. and type)	2x work-class ROVs, ACV type by Schilling
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Operating Depth Rating (m)	3,000m with 1,500m long tether
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Accommodation

Persons	399
Berths (No.)	18x single berth, 17x double berth, 87x 4 man berths
Cabins (No.)	127



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The Subsea7 fleet comprises of vessels that have exceptional versatility, capable of operations worldwide including; pipelay, construction, survey, remote intervention, diving support, heavy lifting operations, renewables and decommissioning.

