



SEAWELL

WELL INTERVENTION VESSEL



www.helixesg.com

SEAWELL

WELL INTERVENTION VESSEL



The **Seawell** is a custom designed, dynamically positioned light well intervention and saturation diving vessel.

Since 1987, the **Seawell** has been operating throughout the North Sea, providing subsea well intervention solutions and pioneering subsea Light Well Intervention (LWI).

The **Seawell's** unique design and multi-service capability significantly reduces intervention time and provides a cost-effective method of maintaining subsea well stock, through well maintenance and production enhancement solutions. The **Seawell's** track record is second to none, having intervened in more than 700 wells, decommissioning over 200 live and suspended wells, including 15 subsea fields.

The **Seawell** is a DP2 light well intervention and saturation diving vessel which features a purpose built Module Handling System (MHS) tower

positioned over a 7.0m x 5.0m moonpool. The main winch is rated to 150 Te (SWL) hookload capacity in both passive or active heave compensation modes. The tower also incorporates guide wire tensioners and winches, active and passive podlines and constant tension Launch and Recovery System (LARS) winches.

The **Seawell's** MHS is capable of deploying both 5" and 7" SIL systems to 500m water depth. This includes the 73/8" Electro-Hydraulic SIL which enables communication with next generation Subsea Trees. **Seawell's** subsea crane provides an AHC lifting capacity of 45Te. Inbuilt vessel tanks provide generous storage for chemical treatment (pumping) capabilities.



EXPERIENCE

The pioneering LWI vessel, with an unrivalled track record over 30 years. The **Seawell's** track record is second to none, having intervened in more than 900 wells, decommissioning over 200 live and suspended wells, including 15 subsea fields.



INNOVATION

Many notable firsts in Subsea Well Intervention, including first vessel to have UK Safety Case, first subsea tree recovery, monohull CT operations via rigid riser, and horizontal tree re-entry.



VALUE

Unique, versatile vessel with diving capability, capable of simultaneous subsea construction and well intervention activity.

MAIN CHARACTERISTICS

Vessel Name	Seawell
Owner	Helix Energy Solutions Group
Charterer	Helix Energy Solutions Group
Builder	North East Shipbuilders
Year Built	1987
IMO Number	8324567
DNV Class Notation	DNV X1A1, Supply Vessel, SF, CRANE, DSV-I and III, DYNPOS AUTR (A), E0, HELDK, WIU-1, WELL1 Accommodation
Flag	United Kingdom [GB]

DIMENSIONS

Length Overall	114 m (374 ft)
Breadth Moulded	22.5 m (74 ft)
Depth Moulded	11 m (36 ft)
Draught	7.27 m
Operating Draft	6.4 m – 7.26 m (21 ft – 24 ft)
Displacement	11,935 Te
Gross Tonnage	9,158 Te
Deadweight	4615 Te

DIVING SYSTEM

Depth Rating	300 m (984 ft)
Divers in Saturation	up to 18
Diving Bell	2 x 6 m ³ (212 ft ³)

POWER & THRUSTERS

Generators	6 x 2,560 kW
Aft Thrusters	3 x 1,325 kW
Foward Thrusters	3 x 2,200 kW
Vessel Speed	14 kts max, 12 kts efficient

DYNAMIC POSITIONING SYSTEM (DP)

Kongsberg K-Pos DP-21 and Interdependent Joystick Back Up
Kongsberg SDP 11 Back Up System
Dynpos AUTR (DP2)

CRANAGE

Individual Cranes	45t main crane @ 20 m Aux - 7.5t @ 3 m Aux 5t @ 14 m
Operating Depth	500 m (1,640 ft)

INTERVENTION TOWER

Lifting Capacity	150 Te
Free Lifting Height	28.4 m
Active Heave Compensated	150 Te at Hs5m

DECK

Deck Load	5 Te per m ²
Above Main Deck	900 m ² (9,688 ft ²)
Below Main Deck	250 m ² (2,691 ft ²)

MOON POOL

Dimensions	7 m x 5 m (23 ft x 16 ft)
------------	---------------------------

WELL STIMULATION

Mud / Frac Liquid Tanks	487 m ³ (3,063 bbl)
-------------------------	--------------------------------

ACCOMMODATIONS

Accommodations	131
Cabins	21 x single person cabins 55 x two-person cabins

Vessel also features a galley and mess room, conference rooms and offices on various decks, Helideck reception area, heli-lounge, lounges, gym, hospital and sick bay

Three Subsea Intervention Lubricators (SIL's) 5-1/8", 7-1/16" and 7-3/8" deployed from the **Seawell** enable efficient and cost effective riserless intervention or abandonment solutions for subsea wells. Well Ops has unrivaled experience in the development of subsea intervention systems and these are designed with both ease of handling and operational effectiveness in mind. The SIL systems are conduits for interfacing with conventional/vertical and horizontal/spool subsea trees and act as a means for both well access and well control purposes. The SIL's fully hydraulic control system has been developed and refined during the vessels time in service and provides a high level of redundancy and unparalleled operational reliability.

5-1/8" SUBSEA INTERVENTION LUBRICATOR (SIL) SPECIFICATIONS

Max. Bore Diameter	5-1/8 in production
Max. Working Pressure	10,000 psi
Surface Equipment	Hydraulic Power Unit (HPU), Hydraulic Control Panel (HCP), flushing skid, main umbilical, choke manifold, riser assembly
Subsea System	Lower Base Section (LBS)
5-1/8 in 10 ksi WP	
QMU connector	
Hydraulic DHSV delay system	
Kill line capability	
Redundancy systems	
Subsea accumulation	
ROV panels for additional XT and miscellaneous controls	
ROV override on primary well barriers	
ROV override for mandrel release	
Non orientating latch / mandrel system	
Stab plate for riser hoses with access platforms	
Diverless	
Weight ~ 25 Te without TRT connector	

7-3/8" SUBSEA INTERVENTION LUBRICATOR (SIL) SPECIFICATIONS


Max. Bore Diameter	7-3/8 in bore
Max. Working Pressure	10,000 psi
Diverless system with wireline capability to 1,500 m	
Modular lubricator riser supporting up to and beyond 22 m wireline tool string (Vessel dependent)	
7-3/8 in 10,000 psi hydraulic latch mandrel integrated with wire cutting ball valve	
Wire cutting ball valve 7-3/8 in 10,000 psi Norsok D002	
7-3/8 in 10,000 psi WP Dual wireline BOP with inverted ram for contingency operations	
10,000 psi WP Subsea Grease package assembly c / w redundant Subsea storage with recharged capability via Umbilical or ROV	
13-5/8 in 10,000 psi Hydraulic EDP connector and re-entry hub (7-3/8 in bore)	
7-3/8 in 10,000 psi WP Upper and lower shearing gate valves. Hydraulically actuated fail safe. Norsok D002	
ROV override panel for contingency functioning of critical wellbore functions	
2 in Kill Line with Deco Line capability	
Dual redundant MUX control system with fiber-optic primary and secondary control	
Dedicated emergency shutdown system independent of MUX controls	
Optional: En-Tegrity safety head	
7-3/8 in 10,000 psi WP. Dual metal-to-metal fail safe closed sealing with shearing capacity in excess of Norsok D002	
Suitable for all Subsea XT's and Wellhead connections	





Seawell's IHC Tower


NOTE: 7 1/16" SIL system specifications are available on request.





 **Helix Energy Solutions
Headquarters**
3505 W. Sam Houston Parkway
North, Suite 400
Houston, Texas 77043 USA


 Office 281.618.0400


 **Helix Well Ops (USA)**
3505 W. Sam Houston Parkway
North, Suite 400
Houston, Texas 77043 USA

 Office 281.618.0400

 **Helix Well Ops (UK)**
Alba Gate,
Stoneywood Park,
Stoneywood Road, Dyce,
Aberdeen, AB21 7DZ, UK

 Office +44(0)1224.351800

 **Helix do Brasil**
Praia do Botafogo, 228 16º
andar, Ala A
Botafogo, Rio de Janeiro, RJ,
Brazil CEP 22250-145

 Office: 55 21 2006-0436

www.helixesg.com

Revision Date: 07.11.2018
Helix Energy Solutions Group accepts no responsibility for and disclaims
all liability for any errors and/or omissions in this production.

SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE.