WELL ENHANCER
WELL INTERVENTION VESSEL
EXPERIENCE

10 years of continuous North Sea and Africa operations in diver supported riserless intervention.

INNOVATION

The Well Enhancer is capable and experienced in deploying coiled tubing from a monohull.

VALUE

Combines diving with riserless intervention in a manner unique to Helix WellOps.
### MAIN CHARACTERISTICS

- **Vessel Name:** Well Enhancer  
- **Owner:** Helix Energy Solutions Group  
- **Charterer:** Helix Energy Solutions Group  
- **Builder:** IHC Merwede  
- **Design:** IHC Type-22 design  
- **Year Built:** 2009  
- **IMO Number:** 9421996  
- **DNV Class Notation:** DNV, 1A1, Well Intervention Unit, SF, CONF-C(3), HELDK-SH, CRANE, DSV-SAT, EO, DYN-POS-AUTO, DK(+)
- **Flag:** United Kingdom [GB]

### DIMENSIONS

- **Length Overall:** 132 m (433 ft)  
- **Length between perpendiculars:** 117.7 m  
- **Breadth Moulded:** 22 m (72 ft)  
- **Depth Moulded:** 11 m (36 ft)  
- **Design Draft:** 6.25 m  
- **Scantling Draft:** 6.75 m  
- **Displacement:** 13,885 Te  
- **Gross Tonnage:** 9,383 Te  
- **Speed:** 13 knots  
- **Deadweight:** 7,950 tonnes

### ACCOMMODATIONS

- **Accommodations:** 122  
- **Cabins:**  
  - 18 x single person cabins  
  - 35 x two-person cabins  
  - 5 x Captain cabins  
  - 7 x Officer 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.

### CRANAGE

- **Main Crane:** 100 Te  
- **Operating Depth:** 600 m (1,969 ft)  
- **Auxiliary Cranes:** 2 x 5 Te SWL  
- **Effer Crane:** 15 Te SWL

### HEILIDECK

- **Rating:** Sikorsky S-91, S-92, Super Puma AS332L2  
- **Rules:** Compliant with CAP 437  
- **Diameter:** 22.0 m

### MOON POOL

- **Dimensions:** 7.02 m x 7.32 m (23 ft x 24 ft)

### DECK

- **Deck Load:** 10 Te per m (1 ton per ft²)  
- **Above Main Deck:** 1,100 m² (11,840 ft²)  
- **Below Main Deck:** 200 m² (2,691 ft²)

### MULTI-PURPOSE TOWER (MPT)

- **Lifting Capacity:** 150 Te  
- **Active Heave Compensated:** 150 Te (nominal 100 Te)  
- **Subsea Lubricator Winch:** 150 Te (nominal 100 Te)  
- **4 guide line tensioners**  
- **2 pod line tensioners**

### DIVING SYSTEM

- **Depth Rating:** 300 m (984 ft)  
- **Divers in Saturation:** up to 18  
- **Diving Bell:** 5.4 m³ (191 ft³)

### POWER & THRUSTERS

- **Installed Power:** 4 x 3,000 kW, 2 x 1,500 kW  
- **Fixed Propulsion:** 2 x 3,000 kW  
- **Bow Tunnel Thruster:** 2 x 1,720 kW  
- **Bow Thruster / Retractable:** 1 x 1,200 kW

### DYNAMIC POSITIONING SYSTEM (DP)

- **Kongsberg SUP-21 System interfaced to:**  
  - 2 x Kongsberg K-POS-DP-21  
  - 1 x Kongsberg K-POS-DP-11 (back-up system)  
- **IMO DP Class 3 & DYNPOS AUTRO**

### SUBSEA INTERVENTION LUBRICATOR (SIL)

The 7-3/8” Subsea Intervention Lubricator (SIL) deployed from the Well Enhancer enables efficient and cost effective riser and riserless intervention or abandonment solutions for all subsea wells. Well Ops 7-3/8” SIL is the next generation in the family of intervention systems.

More adaptable than the 5-1/16” and 7-1/16”, the 7-3/8” SIL also interfaces to riser packages and in doing so, sets the standard for monohull based coiled-tubing, well intervention solutions. Well Ops has unrivaled experience in the development of subsea intervention systems and the SIL’s are designed with both ease of handling and operational efficiency in mind.

The 7-3/8” SIL is a single trip deployment system that gives access to both conventional and horizontal (large bore) trees, with the ability to perform safe and efficient riserless wireline and riser-based coiled-tubing operations from a monohull vessel. The 7-3/8” SIL features an electro-hydraulic control system which provides a high level of redundancy and excellent reliability. The control system is an integrated system to topside hydraulic/grease generation and distribution systems as well as the subsea system and third party subsea trees. Access to the master control status mimic will be available from onshore.

7-3/8” through bore at 10,000 psi WP

Diverless system with wireline and coiled tubing capability

Safety head details: 7-3/8” in Norsok D002 qualified 10 ksi single action with shear capability shearing 4.5 in perforating guns and tool string. (With proximity feedback to master control station)

Upper test valve and lower test valve: 7-3/8” in Norsok D002 10 ksi shearing gate valves fail safe hydraulic actuated. (With proximity feedback to master control station)

Wire cutting ball valve integrated with latch (upper section) latch mandrel integrated with wire cutting ball valve 7-3/8” in 10 ksi Norsok D002

Supports 22 m tool string mode in wireline capability at 600 m

ROV manual override contingency for all wellbore functions

High angle emergency disconnect package for riser operations

DKSV closure delay system

Twin kill / deco line capability

Complete redundancy within systems.