This vessel has a unique multi-service capability that has been designed to facilitate the easy handling of equipment and the effectiveness of well intervention operations. This provides cost-effective solutions in both well intervention and subsea services. All disciplines are under one roof to provide the ultimate integrated solution. IHC can take full responsibility for the design, construction, delivery and integration of all equipment, including the tower and diving spread and third-party specialist equipment. The latest technology in electrical drives and platform automation optimises the design, construction and operation of IHC's complex working vessels.

Excellent system design and vessel integration are the keys to the safe, reliable and efficient launch and recovery of subsea modules, and provide safe access to a live subsea well to commission downhole services.

IHC’s module handling towers are custom made and adapted to comply with a customer’s needs:

- optimised logistics and increased efficiency
- increased operational windows
- subsea equipment parked in tower
- movable service platforms for easy equipment access
- cursors for safe equipment guidance
- optimised use of deck space
- hoist winches on tower or integrated in vessel
- deepwater deployment by either steel or fibre rope
- multi-functional heave compensation systems
- fully integrated control systems.

INNOVATIVE VESSELS AND ADVANCED EQUIPMENT
Currently, there are more than 5,000 subsea wells across the globe, with more being drilled every day. Many of those wells are already a decade old with many more not far behind. Well intervention holds the potential to extend the productive life of aging wells and repair damaged or underperforming wells. It can bring oil and gas companies substantially higher profits from otherwise non-economic wells.

To enable safe working conditions and access to a live subsea well, IHC designs and delivers turnkey vessels and equipment which enable improved subsea module handling and well intervention operations. These range from subsea tree and module installation, repair and maintenance, and decommissioning, to well stimulation and downhole subsea well intervention.

Our highly advanced module and deck-handling systems are custom-made using proven IHC technologies. These can be adapted to comply with your vessel’s layout and specific application requirements — ranging from shallow to deep waters. Deepwater intervention involves specialist handling solutions to ensure operations are reliable and safely performed. Our systems are specifically designed to deploy and retrieve advanced subsea equipment according to the highest industry standards. Module-handling towers are used during operations to support the main hoist wire, guide, pod lines and intervention campaign-specific downlines, wireline, coiled tubing, riser and drill pipe.

**DECK-HANDLING EQUIPMENT**

Our intervention solutions can be complemented by the following packages:
- derricks, intervention and module-handling towers
- downline and umbilical deployment systems, such as reeers and sheaves
- coiled tubing equipment, such as full spreads, reeers, injectors and compensated lifting frames
- deck skidding systems
- moonpool hatches and bottom doors
- downhole tool assembly and handling equipment
- lubricator and tubular handling equipment, such as risers and drill pipe.

**HEAVE COMPENSATION SYSTEMS**

IHC can offer a wide range of motion compensation equipment, ranging from in-line heave compensators (providing passive and active heave compensation) to winch systems with integrated active heave compensation functionality and in-line passive wire rope tensioners.

Our motion compensation systems will safeguard the soft landing and recovery of valuable equipment and require minimum installed power while making no compromise on safety or reliability.

**DECK SKIDDING SYSTEMS**

IHC’s deck skidding arrangements are designed for safe storage and horizontal transportation onboard vessels during operations and transit. IHC provides integrated and on-deck solutions in any desired configuration. Particular attention is paid to the robust design and flexibility to ensure low integration costs and the extended lifetime of the equipment. The overall objective is to guarantee maximum safety during severe offshore weather conditions.

**MODULAR SOLUTIONS FOR LIFE OF FIELD SERVICES**

Equipment solutions can easily be combined to meet operational needs, supporting activities from a life of field perspective.
**DOWNLINE TREE**

**MSV**

According to the highest industry standards, we deploy and retrieve advanced subsea equipment for campaign-specific downlines, wireline, and coiled tubing. Our systems are specifically designed to ensure reliable and safe subsea well intervention.

Deepwater intervention involves specialist handling requirements – ranging from shallow to deep waters. We consider the following packages:

- Downhole tool assembly and handling equipment
- Moonpool hatches and bottom doors
- Deck skidding systems
- Reelers, injectors, and compensated lifting frames
- Coiled tubing equipment, such as full spreads, reelers, and sheaves
- Downline and umbilical deployment systems, towers

The design allows minimised production downtime and provides cost-effective well maintenance, production enhancement, and well abandonment solutions.

**SEAWELL – LIGHT WELL INTERVENTION MODULE HANDLING SYSTEM**

The SEAWELL pioneered the well intervention industry when it first entered North Sea service as a diving support vessel. It has since built a track record that includes saturation diving and riserless well intervention work. Since 1987, the vessel has entered more than 650 wells, and decommissioned more than 150 live and suspended wells, as well as 15 subsea fields.

The SEAWELL has recently been refitted and features an IHC purpose-built module handling system (MHS) tower which is capable of deploying both 5” and 7” SIL systems up to 500m in depth. The main winch is rated to 150 tonnes (SWL) hook load capacity in both passive and active heave compensation modes. The subsea intervention lubricator (SIL) can be skidded pre-assembled and connected to its control umbilical from parking to launch position and deployed in a single lift.

The tower also incorporates guide and pod line tensioners and winches, equipped with passive and active heave, in addition to constant tension functionality. The advanced and fully integrated control system allows for operator centralised operations.

Three SILs – 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.

**INNOVATIVE VESSELS AND ADVANCED EQUIPMENT**

**LIGHT WELL INTERVENTION VESSEL**

This vessel has a unique multi-service capability that has been designed to facilitate the easy handling of equipment and effectiveness of well intervention operations. This provides cost-effective solutions in both well intervention and subsea services. All disciplines are under one roof to provide the ultimate integrated solution. IHC can take full responsibility for the design, construction, delivery, and integration of all equipment, including the tower and diving spread and third-party specialist equipment.

The latest technology in electrical drives and platform automation optimises the design, construction, and operation of IHC’s complex working vessels.

**CUSTOM-MADE MODULE HANDLING TOWERS**

Excellent system design and vessel integration are the keys to the safe, reliable, and efficient launch and recovery of subsea modules, and provide safe access to a live subsea well to commission downhole services.

IHC’s module handling towers are custom made and adapted to comply with a customers’ needs:
- Optimised logistics and increased efficiency
- Increased operational windows
- Subsea equipment parked in tower
- Movable service platforms for easy equipment access
- Cursors for safe equipment guidance
- Optimised use of deck space
- Hoist winches on tower or integrated in vessel
- Deepwater deployment by either steel or fibre rope
- Multi-functional heave compensation systems
- Fully integrated control systems.

**VESELS AND EQUIPMENT**

**THE WORLD’S FIRST MONOHULL VESSEL CAPABLE OF COILED TUBING INTERVENTION**

**WELL ENHANCER – LIGHT WELL INTERVENTION AND DIVING SUPPORT VESSEL**

The Well Enhancer is a 132m long purpose-built vessel of high performance and quality. IHC custom designed and built the vessel to accommodate a multipurpose tower, an 18-person twin bell saturated diving system rated to 300m, twin work class ROV system and AHC crane, all integrated into the design of the ship to carry out full IRM and light construction services. The vessel can also perform a range of well testing and production flow-back services.

Key features include a multipurpose tower and deck handling system, utilised for subsea/well operations and deployment of a small bore riser and coiled tubing due to a generous deck space area. The FPS system, three engine rooms and propulsion systems provide triple redundancy and help the vessel to be extremely reliable. Safety and security are guaranteed during intervention work by a gas closure system, which uses overpressure to protect the vessel’s accommodation.

The design allows minimised production downtime and provides cost-effective well maintenance, production enhancement, and well abandonment solutions.

**WEphoon**

**INTERVENTION TIME**

**MULTI-SERVICE CAPABILITY**

**UNIQUE DESIGN AND MULTI-SERVICE CAPABILITY SIGNIFICANTLY REDUCES INTERVENTION TIME**

**EQUIPMENT**

**TUBING INTERVENTION**

**CAPABLE OF COILED TUBING INTERVENTION**

**VESSSEL**

**INTERVENTION AND DIVING SUPPORT VESSEL**

The SEAWELL has recently been refitted and features an IHC purpose-built module handling system (MHS) tower which is capable of deploying both 5” and 7” SIL systems up to 500m in depth. The main winch is rated to 150 tonnes (SWL) hook load capacity in both passive and active heave compensation modes. The subsea intervention lubricator (SIL) can be skidded pre-assembled and connected to its control umbilical from parking to launch position and deployed in a single lift.

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Three SILs – 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.