

UT 767 CD.



New thinking applied offshore

Anchor handling in ultra-deep water, well intervention, icy water operation, safer deck work, an increased focus on the environment: these factors drive offshore vessel design.

The UT 712 L under construction for Olympic Shipping features the full range of new Rolls-Royce offshore solutions, including systems for making deck work easier and safer, DP2 dynamic positioning, and a rim drive tunnel thruster. Although the UT 712 type-name dates back to the 1980s, it has been retained because today's vessels occupy a corresponding position in the market. But there have been enormous advances in both ship design and equipment in the intervening years and today's UT 712 is a far more advanced vessel than its predecessor.

A thoroughly up-to-date hull design has been developed with a bulb bow, Ice IC and Clean class, combining efficient propulsion and station keeping with low motions in a seaway. This 16,000hp anchor-handling tug/supply vessel will be 78.3m long overall and 17.2m beam.

Stig Remøy, head of Olympic Shipping, says: "We chose the UT 712 L design because it is seen internationally as a good workhorse that is attractive to charterers. At the same time the equipment package will meet the future needs of the North Sea oil and gas industry, which tends to set standards for other parts of the world. In particular, we feel the need to provide the best available solutions for making life safer for people working on deck."



UT 732 CD.

UT 787 CD.



A vessel of UT 767 CD design, now under construction, will deliver light well intervention services that include production logging and plugging and gauging operations.

THE CD SUFFIX MEANS CLEAN DESIGN, THE STRICTEST ENVIRONMENTAL NOTATION FROM THE CLASSIFICATION SOCIETIES

stability, low motions and freedom from spray and green water on deck. The deck will be dominated by the module-handling tower and a large working deck area has been specified so that containerised tanks and equipment can be carried. A large crane will be installed to give heavy subsea lifting capability and there will be an area of low freeboard aft to facilitate lifting equipment over the stern. Two ROVs will be carried in hangars, one either side of the vessel.

A dynamic positioning requirement corresponding to IMO DP3 has a major impact on the propulsion system. Island Offshore has specified a diesel-electric propulsion system with azimuth thrusters for main propulsion. Electrical power will be generated by four Bergen gensets of two different sizes to give maximum operating flexibility. Two Ulstein Aquamaster Azipull thrusters with pulling propellers will provide the main propulsion and manoeuvring forces, backed up by two Supersilent tunnel thrusters, and a swing-up azimuth thruster under the bow which will be powered by its own independent diesel engine.

Well intervention and ROV operations imply a much larger crew than is necessary for navigating the ship so accommodation will be provided for 95 people in single staterooms.

UT 787 CD

Island Offshore has also ordered the offshore vessel that has the honour of being the 500th UT-Designed vessel to be built and features the new Rolls-Royce developments in ship design and improved safety on deck.

The newly developed UT 787 CD design is a hypermodern offshore vessel that can place anchors with precision in ultra-deep water, carry all required supplies, and also position equipment on the seabed in 2,000m of water. The design focuses on fuel efficiency in the transit and position-keeping modes together with a high bollard pull and special Rauma Brattvaag deck machinery suitable for

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anchor-handling operations in very deep water.

Clean Design is the strictest environmental class, which means that the vessel's impact on the environment will be as small as possible; particularly important if the vessel operates in easily damaged areas such as the Barent's Sea. There is an integrated hangar for a work-class ROV, so anchors can be placed very precisely using ROV inspection. Using the A-frame and the moonpool items of equipment weighing 150 tonnes each can be positioned on the seabed in up to 2,000m of water.

The UT 787CD is 78.3m long with a broad beam of 22m and a bollard pull in the 230-tonne region.

A comprehensive orderbook

At the time of going to press there are altogether 59 UT-Design vessels on order. But it is also healthy that the majority of vessels in the orderbook are up-to-date designs for PSVs and anchor-handlers which meet the general needs of the market. Seventeen of them are the popular UT 755 supply boat and no fewer than 11 are the UT 722 AHTS, in both cases the total includes variants of the standard type.

Governments are more aware of the need to prevent and control coastal pollution incidents as well as carrying out other coastguard functions, and this is reflected in orders for UT-Design packages for India and Spain.

Offshore vessels designed and equipped by Rolls-Royce are on order at shipyards in many countries, including Brazil, India, Italy, Norway, Singapore, Spain and Sri Lanka.

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UT 732 CD

Farstad Supply has ordered a large and powerful AHTS to a new Rolls-Royce UT 732 CD design. On delivery in mid-2007 it will provide support for rig operations in ultra deep water and tough weather conditions.

It is the most valuable design and equipment package for an individual UT-Design ship. This vessel is a 92.7m anchor-handler with no less than 27,500hp and a deadweight of about 4,800 tonnes. Ice class 1C has been specified, together with dynamic positioning to DNV AUTR standard and both Clean Design and Comfort class notations.

UT 767 CD

Island Offshore Management has won a large contract to deliver light well intervention services to Statoil. Rolls-Royce has developed a new design, type-named UT 767 CD, for the vessel which is to carry out this work and will provide the design and equipment package.

Intervention services envisaged include production logging, plugging and gauging operations, perforation and re-perforation and downhole mechanical work. The vessel will also carry out ROV operations. Working on live wells means that the ship has to comply with very strict regulations. It will be built to DNV's Ship-Shaped Well Intervention Unit class rules with dynamic positioning to DYNPOS-AUTRO standard. Island Offshore has also specified Clean Design class.

To meet this difficult brief, Rolls-Royce has developed a 116m-long 25m-beam vessel with a large freeboard to give the required