

ULSTEIN TODAY

NEWSLETTER FROM ULSTEIN

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New visions ULSTEIN A101



ULSTEIN WITH OWN DESIGN

«One of our main objectives is to develop our own designs to bolster our relationship with our customers,» says Tore Ulstein, vice president at Ulstein Verft AS. In June this year Ulstein entered into an agreement with Olympic Shipping AS to design and build an Anchor Handling Tug Supply vessel of the **ULSTEIN A101** type. The ship is to be delivered in December 2001.

The new **ULSTEIN A101** design, which has been developed by the design department at Ulstein Verft, is the first design from Ulstein Verft since it separated from the former Ulstein group.

“TURNING VISIONS INTO REALITY”

“Establishing our own department to develop ship designs has been a natural step for us to take. By doing this we are far more active in the development of products and our own expertise. Ulstein’s goal has always been to develop and build vessels that satisfy the customers’

wishes and future needs. To maintain our high level of competitiveness it is important that we work closely together with our customers, both before and during building and after we have delivered the ship. Simply turning visions into reality,“ says Tore Ulstein.

LINK BETWEEN SHIPPING COMPANY AND SHIPYARD

“It’s extremely advantageous to have an integrated design department at the shipyard. The design department is an important liaison between the shipping company and shipyard. This way we look after the needs of the customer while at the same time we can adapt the design to the shipyard’s production facilities during the development phase – and by that I mean a building-friendly design,“ adds Ulstein.

ULSTEIN A101

ULSTEIN A101 is an Anchor Handling Tug Supply vessel that can be used for a number of offshore operations. With a bollard pull of minimum 240 tonnes the vessel is able to carry out all types of operation within anchor handling at deep waters, and can also be used for towing, installation and supply services within the offshore industry.

When designing the vessel great importance has been attached to flexibility and functionality so that it will be a top-line anchor handling

vessel with large capacity.

“For anchor handling vessels operating with heavy loads and high forces in deep water, it can be difficult to obtain sufficient stability in all operational conditions. Because of this we have especially paid attention to the vessel’s trim and stability when we designed it. **ULSTEIN A101** has a tank system which gives excellent conditions with all types of loads and draught,“ says Øyvind Gjerde Kamsvåg, hydrodynamics engineer. He was recently attending when testing the **ULSTEIN A101**-design at the ship model tank at the Norwegian Marine Technology Research Institute (MARINTEK) in Trondheim, Norway. “The tests produced good results both in comparison with our own calculations, and model tests and full-scale trials of similar vessel-types,“ says Gjerde Kamsvåg

OLYMPIC SHIPPING

“We recently looked at various partners to build our new ship, but after careful consideration we chose Ulstein Verft,“ says ship owner Stig Remøy of Olympic Shipping. He explains that the crucial factors in choosing a shipyard were design, quality, price, tradition and being local.

“This is the first time Olympic Shipping AS and its associated companies have had a vessel built at Ulstein Verft, but we have worked

successfully with Ulstein vessels, including our ship M/S Olympic Commander. That’s why we’re convinced that we’ll get an excellent end product.”

Olympic Shipping AS and its associated companies are an offshore and fishing company based in Fosnavåg on Sunnmøre, Norway. The company’s main activity is the operation of four offshore ships in the North Sea, M/S Olympic Commander, M/S Olympic Supplier, M/S Olympic Poseidon, M/S Olympic Princess and F/T Olympic Prawn, a prawn trawler which fishes around the Flemish Cap, Greenland and in the Barents Sea. For more information, visit Olympic Shipping AS at: www.olympic.no

MAIN TECHNICAL DATA ULSTEIN A101

Length overall: 82 m
Breadth moulded: 20 m
Draught: 7.5 m
Deadweight
at max. draught: 3.750 tonnes
Deck cargo (G = 1.0 m
above deck): .. approx. 1500 tonnes.
Cargo deck area: approx. 600 m²
Bollard pull: approx. 240 tonnes
Trial speed: approx. 17 knots
Horse power: approx. 23,100 hp



LAYING AND MAINTENANCE OF FIBRE-OPTIC CABLE

TWO FOR SOLSTAD

June 27 this year Ulstein Verft signed the second contract with Solstad Rederi A/S to build a large vessel designed for the laying and maintenance of fibre-optic cable (Hull no. 258). A similar vessel was ordered by Solstad in March 2000 (Hull no. 257). The ships are slated for delivery in May and October 2001.

For Ulstein the contracts together will be worth about NOK 820 million.

Prefabrication and building of sections for the first hull started May this year. Sections for the foreship are produced by Ulsteins facility in Vanylven, while the aft ships are produced in Poland. The keel-laying of the first sections for the forward part was done in August this year. Launching is scheduled for January 2001.

OCEANIC KING DELIVERED

In March 2000, Ulstein Verft AS entered into a contract with Polar Ship Management AS to complete the building of the cable-laying vessel «Polar King» now «Oceanic King». The ship was delivered on 15 September 2000.

“Oceanic King” (Hull No. 259) has been chartered by the American cable-laying company ITG (International Telecom Group) for a five-year period with further options. The first assignment for the vessel will be to sail to the East Coast of the USA to take on board 4,000 tonnes of cable to be laid across the Atlantic to Great Britain. Polar Ship Management will have a crew of 30 on board the newbuild, while the charterer ITG will have a crew of approximately 40, so that the ship's total capacity of 70 berths is expected to be fully utilised at all times.

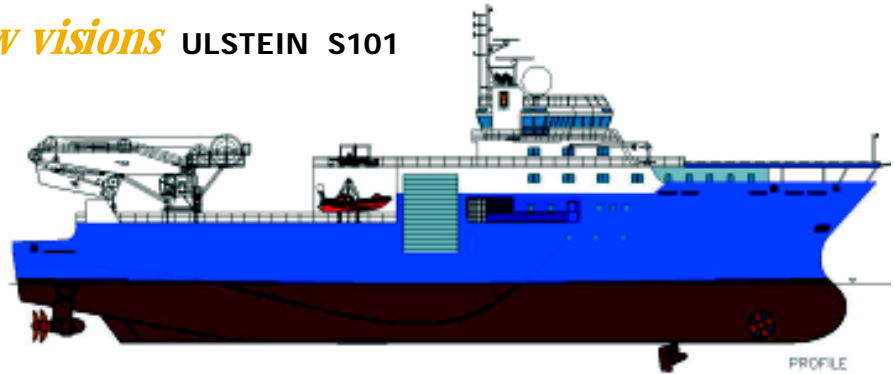
The vessel was originally to be delivered at the end of August, but the delivery date was changed due to delays in the delivery of steel and equipment, and because of an industrial dispute (strike) in the Norwegian manufacturing industries in May this year.



ULSTEIN

ULSTEIN GOES SUB-SEA

New visions ULSTEIN S101



«It is expected that a major proportion of future development on the Norwegian shelf and in international waters will be based on sub-sea solutions.

That's why we have great faith in our new design **ULSTEIN S101**,» says Stig Sandanger Riise, design manager at Ulstein Verft.

ULSTEIN S101 is an ROV-operations vessel developed for a number of monitoring, supporting and sub-sea operation services. **ULSTEIN S101** is suitable for a whole range of ROV/survey services such as supporting and monitoring pipe laying, maintenance work, sea-floor construction, inspection and all types of sea-floor charting and surveying, using an ROV - Remote Operated Vehicle - (remote-controlled mini submarine) and 3D echo sounder.

“This is a specialised market, and the need for such vessels will increase during the next ten years. Currently the greatest interest has been in rebuilds, but we are certain that the demand for specialised newbuilds will increase. As sub-sea operations become more complex, greater demands will be placed on the ROVs. Currently, the thinking is that such vessels should be able to operate at least two or three ROVs at the same time, and under increasingly adverse weather conditions,” adds Sandanger Riise.

DESIGNED FOR THE PURPOSE

“The vessel and its on-board gear are designed with this purpose in mind, and function as a platform for launching and retrieving up to two ROV units at the same time,

with a third observation unit in addition. The hull has been developed to ensure smooth movements in the sea even under harsh weather conditions. With its total length of 88 m and beam of 20.5 m, the vessel will be subjected to a minimum of rolling, pitching and heaving,” says Øyvind Gjerde Kamsvåg, hydrodynamics engineer at Ulstein's design department.

A moonpool has been built into the vessel, designed for handling heavier ROVs and sub-sea units. The moonpool for launching and retrieving sub-sea units measures 5.6 x 5.6 m and is able to handle modules up to 40 tonnes down to a depth of 1000 meters, and up to 25 tonnes to a depth of 2500 meters. A skid system will be fitted to allow the transport of units from the deck to the launching facility in the moonpool. The modules will at all time be secured to the deck.

A launching and retrieval system for work ROVs is mounted on the starboard side. The launching facility has been built into a hangar with a side gate. The moonpool and its accompanying launching facility have also been roofed to ensure viable operations even under harsh weather conditions. Both systems for work ROV and module handling are equipped with active heave compensating winches. This reduces the impact from the ships movements to the ROV and modules by 90-95%. In addition to the launching and retrieval facilities the vessel can be equipped with a dynamic compensated knuckle boom crane on the aft deck to tackle heavier operations.

INTEGRATED EQUIPMENT

Øyvind Gjerde Kamsvåg says that during development of the concept for the vessel great emphasis has been placed on cooperation with Odim, one of the leading international developers and suppliers of equipment for

seismic and sub-sea operations. “Being in direct contact with users of the equipment, Odim is getting input and ideas on all sorts of practical problems. This gives us a much better opportunity to adapt both vessels and equipment to the customers needs,” says Gjerde Kamsvåg.

Odin supplies customised cable-handling and control systems for sub-sea operations, and ROV, intervention, supplementary and maintenance equipment. The systems are fully integrated, but each unit also functions independently. The equipment, which is remote controlled, has a high degree of functionality and flexible positioning, while being robust and simple to maintain. The system has been designed to be able to operate in areas with high gas leakage risks.

FLEXIBILITY

The vessel will be adapted to the various needs found in the market. An example of one possible alternative is that the vessel can be delivered in a stretched version allowing room for an extra work moonpool on deck and with greater deck area.

As the design has been presented here, the **ULSTEIN S101** has been furnished with a diesel-electric propulsion system with two 360 degree-turning compass thrusters. Maximum power of 10,000 kW (13,500 HP) has been calculated, giving a speed of approximately 17 knots.

The vessel will be delivered with dynamic positioning DP II (Dyn Pos AUR). Odim's heave-compensating gear is designed for operations with a significant wave height of 7 to 8 m. The helicopter deck has been dimensioned for a Super Puma AS332L2 or similar. Built for a crew of 60, with 22 double and 16 single cabins, the vessel has ample room both for the crew and for the charterer's sub-sea operations specialists.