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**** Press Release ****

Innovative High-Performance *AVT 37/65-E* Class Escort Tug for Østensjø Rederi AS

In late February, 2005 the high performance *AVT* escort tug ***Velox*** was delivered from Astilleros Gondan of Spain to Østensjø Rederi AS of Haugesund, Norway. ***Velox*** is the first of two tugs being built at Gondan to this new design, designated as the *AVT 37/65-E* Class. The design was developed by Robert Allan Ltd. of Vancouver, BC working in close association with the Østensjø Rederi AS technical representative, Carl Johan Amundsen of Carl J. Amundsen AS, of Haugesund, Norway, and with Voith Schiffstechnik of Heidenheim, Germany.

The ***Velox*** will be used in the Norsk Hydro oil terminal port of Sture, Norway to provide a significant upgrade in tanker escort capability for ships calling there.

The tug is built to DNV notation DNV \boxtimes 1A1, Tug, E0, Oilrec, Fi-Fi 1, Escort (130,10) as well as to the requirements of the Norwegian Maritime Authority.

Particulars of ***Velox*** are as follows:

- Length, overall - 37.00 metres
- Beam, moulded - 14.00 metres
- Depth, moulded - 5.40 metres
- Draft, maximum - 6.90 metres

- Fuel capacity - 120 m³
- Potable water capacity - 24 m³
- Fi-Fi Foam - 20 m³
- Dispersant - 20 m³
- Recovered oil - 100 m³

Propulsion comprises a pair of Rolls-Royce/Bergen Diesel C25:33L8P diesel engines, each rated 2,400 kW at 1,000 rpm, driving a Voith Model 32R6-210-2 cycloidal propeller through a Voith Turbo coupling. This combination delivers a bollard pull of 65 tonnes, and provides a free running speed in excess of 14.5 knots.

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The ***Velox*** is outfitted to the highest standards for a crew of up to six persons. All cabins but one include private en suite facilities. There is a spacious lounge/mess area, a fully equipped modern galley, and a full ship's office/meeting room. Below decks are ample stores spaces and a fitness/exercise room.

The main towing winch is a double drum, hydraulic winch supplied by Karmøy Winch AS. One drum is set up for escort operations, with capacity of 350 metres of 92 mm diameter synthetic hawser. The other drum is set up for towing, with capacity of 1,000 metres of 57 mm diameter SWR. The brake capacity is 300 tonnes. The winch is set up to meet DNV's escort towing requirements, with a hydraulic render/recover feature.

The new design was developed to build on the success of the 40 metre **AVT** tug ***Ajax*** built in 2000, also for Østensjø Rederi AS. The new design incorporates a number of refinements in hull form, deck gear and skeg design to maximize indirect towing performance. This combination marks the ***Velox*** as one of, if not the most effective escort tug afloat, in terms of performance per unit power or performance per size.

Significant design features of ***Velox*** include the following:

HULL FORM

The hull form of ***Velox*** is based largely on the successful form of ***Ajax***, with a number of subtle refinements to increase underwater lateral area with minimum increase in displacement or wetted surface. The distinctive sponson form introduced in ***Ajax*** has been retained, with minor refinements to increase restoring moment when heeled over at maximum escort towing condition. The bow incorporates a "quasi-bulb" form, intended to increase underwater lateral area rather than reducing wave forming pressures.

SKEG DESIGN

The skeg geometry is the result of an extensive series of investigations into shapes and appendages which would enable a significant increase in indirect steering force. A wide variety of options were explored, and their merits in terms of lifting force and complexity were evaluated. The final skeg configuration incorporates a refined profile offering better lift generation than typical NACA profiles and, most critically, incorporates the first application of the Voith "Turbo-Fin" rotating cylinder at the leading edge to maximize lift in the skeg when operating in indirect mode.

TOWING STAPLE

The towing staple on ***Velox*** is very unusual. Designed to accommodate both steel wire and synthetic line, it was clearly necessary to have two distinct apertures which would function effectively in both escort and towing functions. The result is a very wide-based channel slot for the escort hawser operations, with a central fairlead above for towing wire operations. The hawser slot permits the line to migrate far outboard towards the pressure side in an indirect operation, thus reducing the heeling moment on the tug and increasing the line tension capacity.

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This combination of features gives ***Velox*** an indirect steering force capability of 150 tonnes at 10 knots and 130 tonnes at 10 knots within the special requirements of the DnV escort class notation.

For more particulars on this vessel, or other designs please contact:

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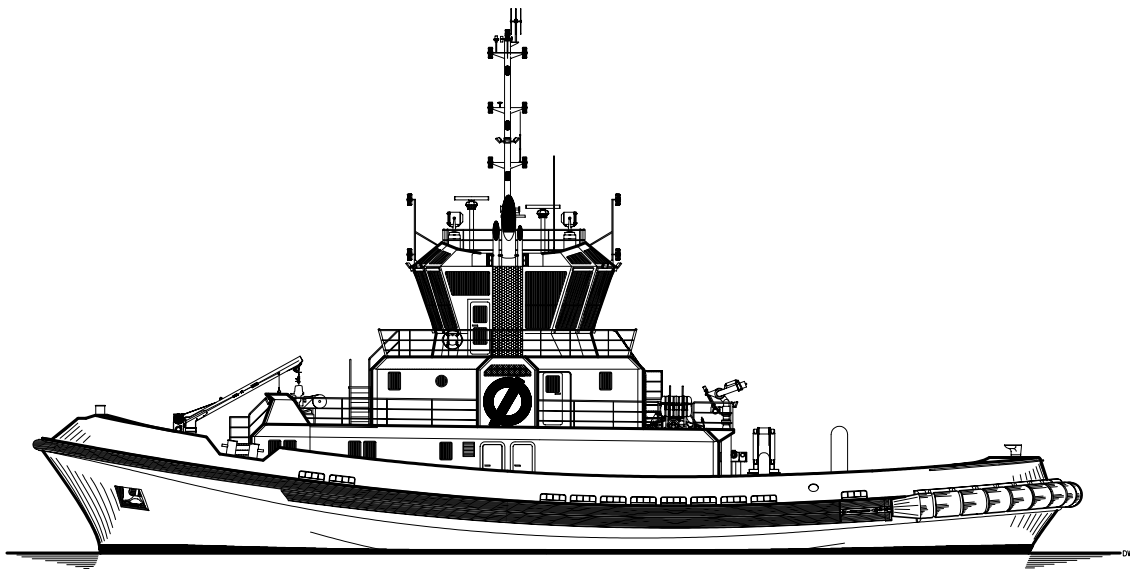
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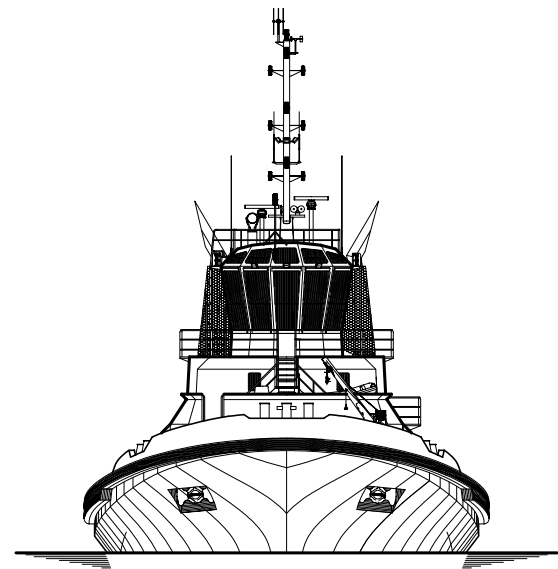
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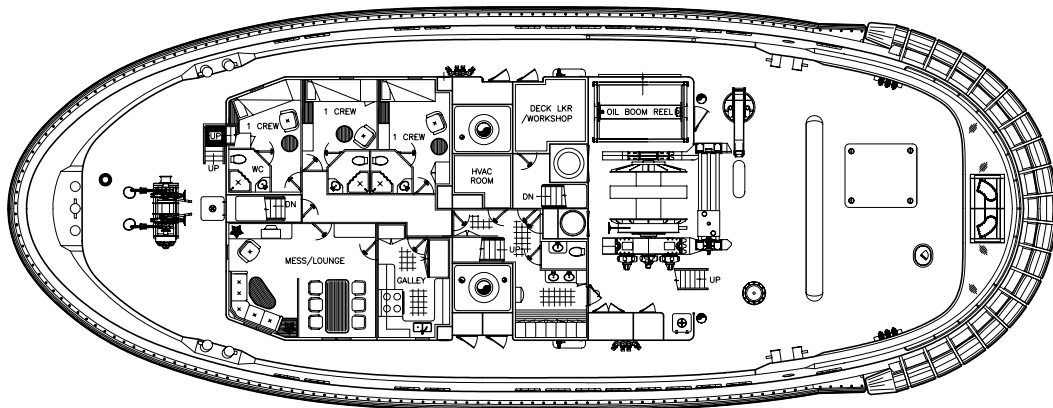




OUTBOARD PROFILE



BOW VIEW



MAIN DECK PLAN