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**ALP introduces its next
generation long distance
ocean towing anchor
handling new-building fleet:**

ALP FUTURE

**ocean towage | anchor handling | offshore supply
positioning and mooring | salvage**



The **ALP FUTURE** class of anchor handling tugs is designed for the worldwide long distance towage of the world's largest floating objects with the ability to offer additional services such as anchor handling, positioning and mooring works.

The **ALP FUTURE Class** is based on decades of experience in ocean towage and offshore work by the **ALP MARITIME SERVICES** management team and was developed in close co-operation with **ULSTEIN of Norway**.

The **ALP FUTURE Class**, initially **four** vessels, is under construction at the **NIIGATA SHIPYARD** in Japan, for delivery between end 2015 and early 2016. **ULSTEIN** was contracted by **NIIGATA SHIPYARD** for the design and delivery of main components, such as the Rolls Royce Towing and Anchor Handling Winch and the fully integrated DP II system.

The **design** assumptions were:

- Sufficient bollard pull and safety redundancy to avoid the need for a third towing vessel for the heaviest tows
- Safe operations
- Environmental protection
- Fuel economy
- Excellent sea keeping and course stability characteristics
- Ultra large fuel bunker capacity, eliminating refueling stops during typical passages
- Anchorchain handling capabilities eliminating the need for additional vessels in F(P)SO/FLNG towage and installation operations
- DP II as per DNV DYNPOS-Autr
- Ice-class 1B

The result is the **ALP FUTURE Class**, now under construction, the **ULSTEIN SX 157®**.

ALP FUTURE's **ULSTEIN X-BOW®** design guarantees optimal course stability and behavior in adverse weather and sea conditions. Her four **MAK** engines produce **24,400 BHP** and give the **ALP FUTURE Class** a bollard pull in excess of **280 tonnes**. On two engines, **ALP FUTURE** still provides an impressive **170 tonnes** bollard pull, which, in combination with her **X-BOW®** hull characteristics, her **DP II** notation, very large bunker fuel capacity outclasses today's typical long distance towing vessels, with less fuel consumption.

ALP FUTURE Class meets our clients present and future needs:

- Stronger and larger towing vessels to match and enable increase in size of FPSO's, FLNG's and similar floating installations
- Security, since transport to site and installation on site is a key shackle in the chain leading to project success
- Independency and reliability for working in remote and hostile areas
- Lower overall costs by eliminating the need for additional (installation, heading control, anchor handling) vessels, higher transit speeds and lower fuel consumption.
- Utmost safety, achieved by redundancy, sea behaviour characteristics, vessel's quality of officers and crew, equipment and outfitting and excellent live-on-board standards for the crew (Norwegian Offshore Standard), four fully independent main engines with auxiliaries.
- Dual role capacity (towing and anchor handling (DP II) offers considerable project savings

The first vessel will be delivered in October 2015. ALP's management team, with decades of hand-on experience in the most complex and largest towing and installation projects, and the all new **ALP FUTURE ULSTEIN SX 157®** long distance anchor handling towing vessels are ready to serve ALP's worldwide clients with **the finest the maritime industry** has to offer:

- Worldwide ocean towage, any distance
- Positioning and hook-up of floating installations to pre-laid mooring systems
- Anchoring of installations and floating objects
- Highest Safety Standard
- Disconnecting and mooring retrieval as part of repositioning or decommissioning operations

With

- Minimal fuel bunkering stops
- Optimal sea keeping (**Ulstein X-BOW®**)
- Fuel efficient, four independent engines configuration
- High Bollard Pull
- Complete safety
- DNV DP II Dynpos-Autr
- Clean Ship
- Ice-Class 1B



The ALP FUTURE Class, the next generation.



Specifications

ALP FUTURE CLASS



General Data

Port of registry	TBA
Call sign	TBA
Flag	TBA
IMO number	TBA
Year built	2016
Manager	ALP Maritime Services BV
Classification	DNV+ 1A1 Offshore Service Vessel+, Anchorhandling, Towing, E0, SF, Iceclass 1B, Fifi II, Tmon, Bis, Dynpos-Autr, Naut-OSV(A), Clean design, Comf-V(3), BWM-T, Recyclable
DNV registration	TBA
Maximum speed	19,0 knots
Service speed	13,0 knots
DP II	ERN 99, 98, 97, 59

Dimensions

Length overall	88.90 m
Length b.p.	83.40 m
Breadth mld	21.00 m
Depth main deck	9.50 m
Design draft	7.00 m
Max operation draft	8.50 m
Deadweight	4250 tonnes
Cargo deck area	550 m ²
Deck load	2400 tonnes - 10 t/m ² max
Chain locker capacity	506 m ³

Towing

Towing winch	ROLLS ROYCE mod. SL400-3T 1° speed: 402 tonnes @ 0 - 13 m/min
Brake holding load	675 tonnes on towing drum's 1 layer 675 tonnes on AH drum's 1 layer
Drums	3 x 86 m x 2510 m steel wire
Control	Remote controlled from bridge
Cable lifters	2 for 76 m rig chains 1° speed: 500 tonnes @ 9 m/min (at max 58 bar)
Tow wire	1 x 2000 m x 86 mm on main tow winch 1 x 2000 m x 86 mm on secondary tow winch 1 x 2000 m x 86 mm on storage reel
Storage reels	1 x 2 compartments 2630 & 620 m 86 mm wire 1 x 3 compartments 1115 m 86 mm wire each

Fibre rope storage drum	Dismountable, max. capacity 7200 m x Ø 203 mm
Stern roller	1 dimension Ø 4000 mm x 5500 mm SWL 650 tonnes
Gog winch	2 x ROLLS ROYCE 30 tonnes pull at 0 - 12 m/min
Capstans	2 hydraulic 13,2 tonnes pull at 0 - 10 m/min
Tugger winches	1 x ROLLS ROYCE 15 tonnes pull at 0 - 30 m/min
Tow pins	2 sets of towing pins designed for horizontal locking of wire. SWL 300 tonnes
Pop up pins	Hydraulic raised/lowered vertical towing guide pin sets (pop up). SWL 300 tonnes.
Karmforks	2 x 600 tonnes, variable inserts upto 120mm chain

Tonnage – capacities

Ballast water	2900 m ³
Fresh water	300 m ³
MGO	340 m ³
HFO	3200 m ³

Machinery

Main engines	4 x MAK 18000 kW / 600 rpm
Propellers	2 CPP 5000 mm in nozzle
Rudders	Flap type
Bow thrusters	2 tunnel thrusters 1500 kW at 228 rpm
Stern thrusters	2 tunnel thrusters 1050 kW at 316 rpm
Generators	3 auxiliary generator set, generator power each approx. 940 ekW. 1 emergency generator set, approx. 200 ekW at 1800 rpm. 2 off shaft generators driven from main reduction gear each 3,150 ekW at 1200 rpm.



Communication Equipment

GMDSS A1 + A2 + A3 + A4

2 MF/HF 150W DSC radio station

1 GMDSS power system

2 GMDSS alarm panel

1 navtex

1 manual EPIRB for wheelhouse

1 automatic EPIRB for wheelhouse roof

2 radar transponder/AIS transponder

3 portable GMDSS VHF w/charger & spare battery

2 satcom-C

1 simplex VHF DSC

1 ship security alert system (SSAS)

1 long range identification tracking (LRIT)

3 fixed VHF set for bridge, slaves for 2 on aft console

1 fixed VHF set for eng control room

2 fixed UHF for eng control room and wheelhouse

3 portable UHF ATEX w/helcom kit

6 portable VHF set

2 smoke diver kit for portable UHF/VHF

1 VSAT + FBB backup

Navigation equipment

1 X-Band ARPA radar with 8" antenna 25 KW . 26" widescreen display

1 S-Band ARPA radar with 14" antenna 30 KW.

26" widescreen display

Performance monitor, interswitch on both radars.

Chart radar on minimum one radar

1 22" chart radar slave monitor for aft bridge

1 ECDIS charting system consisting of:

1 off 26" main ECDIS & 1 off 26" back-up ECDIS

1 UPS system for navigation equipment consisting of:

3 off UPS w/bypass function

2 DGPS for navigation

1 navigation echosounder with ice protection transducer

tank and slave depth indicator for aft bridge

1 doppler speed log with transducer valve and slave

log indicator for aft bridge

3 gyro compasses

1 analog gyro repeater for forward bridge

1 digital repeater for aft bridge

2 digital repeater for steering gear room

2 analog bearing repeaters with 1 off azimuth circle

1 magnetic compass

1 automatic identification system (AIS)

1 voyage data recorder (VDR)

1 sound reception system (SRS)

1 bridge central alarm system (BCAS)

1 bridge watch monitoring system (BWMS)

1 control panel in conning position forward

1 electronic unit with interface to gyro, magnetic compass and rudders.

Accommodation

Complement 18 officers & crew

Single cabins for

officers and crew 27

Accommodation

capacity 35 berths

Additional equipment

1 provision room

1 vegetable room

1 meat room

1 traveling service-crane with a max. SWL of 5 tonnes at 10 m and a max. outreach of 15 m with SWL 3 tonnes.

2 passive roll reduction tank

1 quick release bracket with SWL 300 tonnes.

1 incinerator plant. capacity approx. 400.000 kcal/h, with waste/ sludge mixing tank.

1 stationary compactor for both wet and dry waste.

6 life rafts for 15 people, 3 on each side

1 rescue boat with rigid hull and inboard diesel engine.

1 work boat with rigid hull and inboard diesel engine.

2 chilled water plant (redundant) for air conditioning plant with water cooled condenser.

Each 60% of total cooling capacity.

1 FW generator plant, capacity approx. 10 tonnes/24h