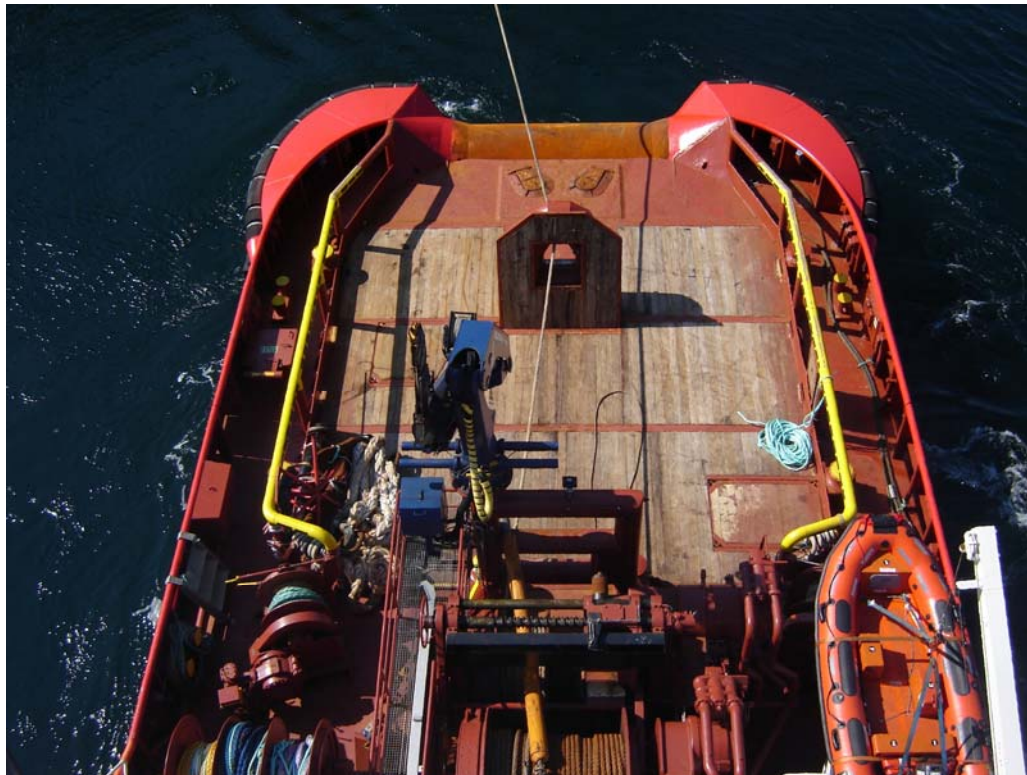
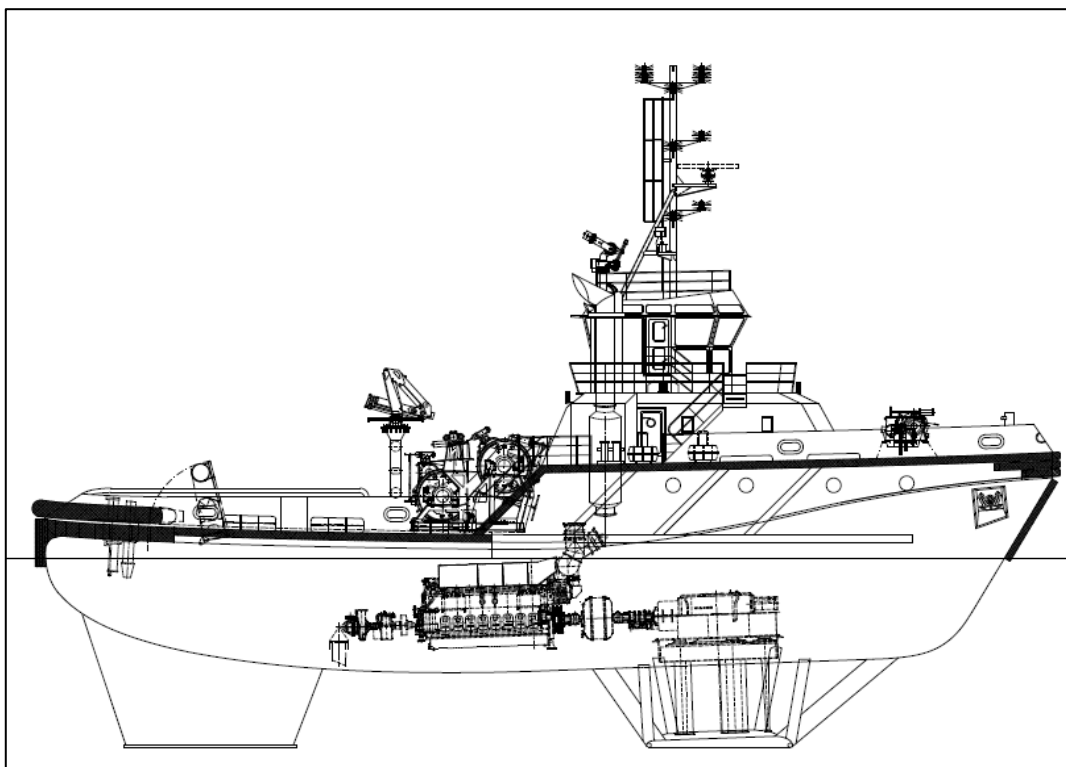


Voith AHT 'BB Ocean'





CLASSIFICATION	
BUREAU VERITAS 1* HULL* TUG FIFI 1 WATER SPRAY – Unrestricted Navigation * AUT-UMS – RECOIL – SYS NEQ1	
REGISTRATION DETAILS	
Builder	Astilleros Armon SA, Spain, 2006
Flag	DIS, Copenhagen
GRT	498
DIMENSIONS	
Length overall	34,50m
Breadth overall	11,60m
Depth	4,60m
Draft	6,40m
Bollard Pull	75 tonnes
Max speed	13,7 knots
ENGINES / PROPULSION	
Two MAK type 8 M 25 diesel engines each 2.640 kW at 750 RPM	
Two Voith-Schneider type 32R5/250 –2	
Two diesel engines Caterpillar type 3406 259 kW driving alternator 306 Kva 380 V 50 Hk	
One ME driven hydraulic pump driving alternator 300 Kva 380 V 50 Hz	
One diesel engine Caterpillar type 3056 95 kW driving harbour alternator 105 Kva 380 V	
CAPACITIES	
Fuel	214 cm
Oil recovery accumulation	42 cm
Fresh water	45 cm
Luboil	17 cm

Foam / Sludge	18cm / 6,5cm
Sewage	3,7 cm
Water ballast	29 cm
TOWING WINCHES (Triple drum Waterfall low pressure hydraulic Winch – Hatlapa)	
Deep-sea towing drum:	Dims dia 750 x 2100 mm Towing wire dia 52 mm length 900 m Static brake holding power 1750 Kn Pull/speed: 300/90 kN at 0-24/0-48 m/min
Harbour towing drum:	Dims dia 750 x 1940 mm Towing wire dia 52 mm length 300 m Static brake holding power 1750 kN Pull/speed: 300/90 kN at 0-24/0-48 m/min Static holding load by brakes: 1750 Kn
Anchor handling/escort drum:	Dims dia 750 x 1940 mm Working wire dia 52 mm length 150 m Static brake holding power 1750 kN Pull/speed: 800/240 kN at 0-9/0-18 m/min Static holding load by brakes: 1000 kN
Spare towing wire dia 52 mm length 900 m stowed in a hydraulically drive storing drum positioned in the store room. Stern roller dims dia. 1800 mm length 4500 mm capacity 150 tonnes SWL. Shark jaws / towing pins / two Hatlapa tugger winches	
NAVIGATION EQUIPMENT	
N. 2 radars type Furuno FAR-2117 completely interconnected N. 1 echo sounder Furuno FE 700 / speed log Furuno DS80 N. 1 gyro compass type SIMRAD GC 80 N. 1 autopilot SIMRAD AP 50 N. 1 magnetic compass / anemometer Walker N. AIS Furuno FA100 N. 2 GPS furuno GP 90	
COMMUNICATION EQUIPMENT	
GMDSS area A1 + A2 + A3 plus Mini-M satellite connected with telephone fax and e-mail	
MISCELLANEOUS	
Two Single cabins / 6 double cabins / all with own toilet/showers Sewage treatment plant Reverse osmosis fresh water producer capacity 3.2 T/day Fresh water transfer pump (to other vessel) capacity 35 mc/hour 5 bar Hydraulic driven crane Palfinger type PK 3208 M capacity 8,1 T at 3.5 m and 2.2 T at 12 m Hydraulic operated foldable towing "A" frame (flush deck during anchor handling activities)	

All the above particulars are believed to be correct, but not guaranteed