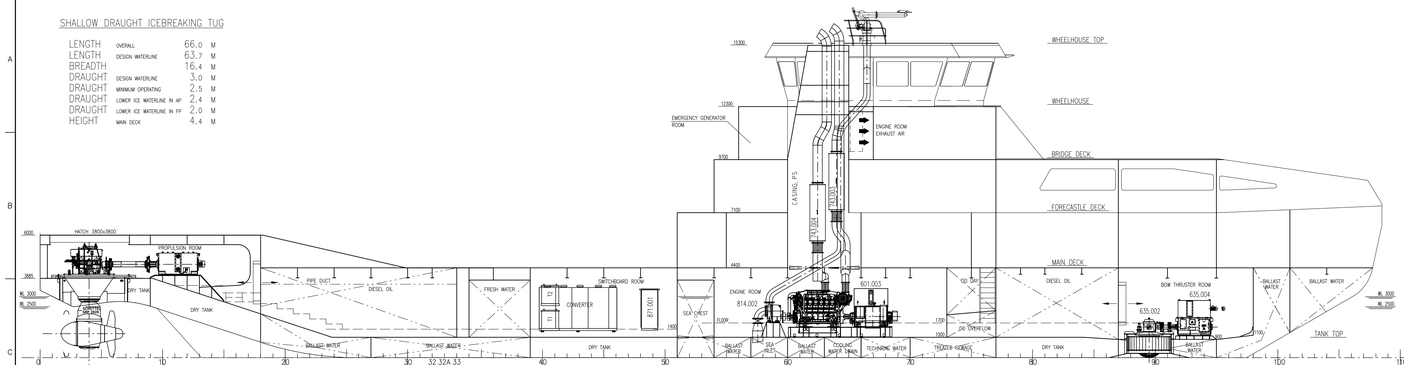
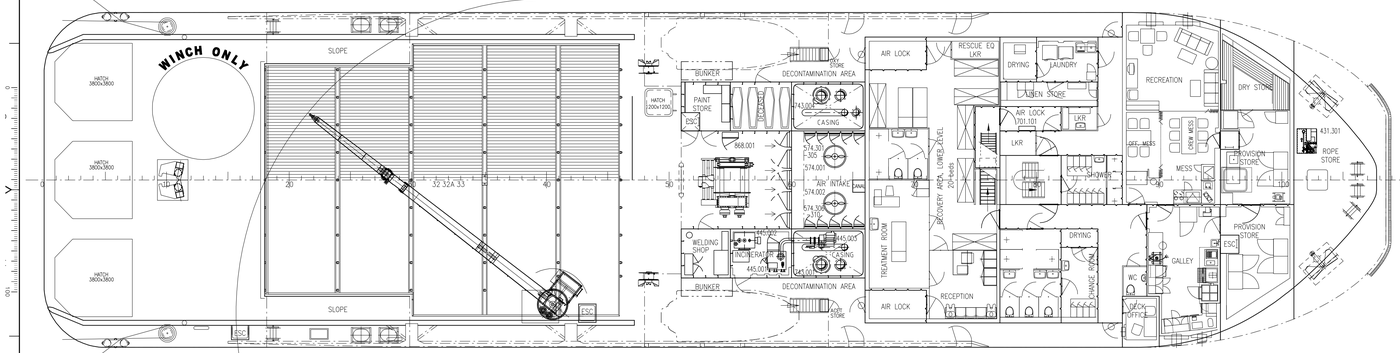
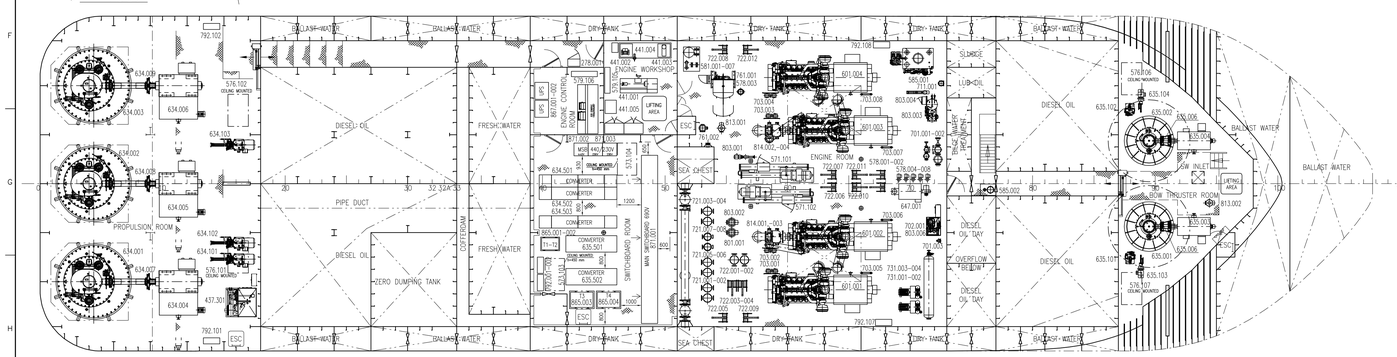
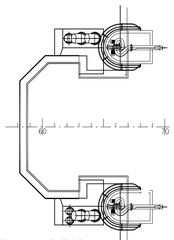
SHALLOW DRAUGHT ICEBREAKING TUG

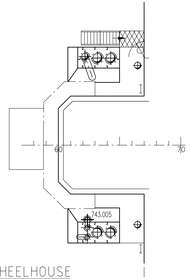
LENGTH	OVERALL	66.0	M
LENGTH	DESIGN WATERLINE	63.7	M
BREADTH		16.4	M
DRAUGHT	DESIGN WATERLINE	3.0	M
DRAUGHT	MINIMUM OPERATING	2.5	M
DRAUGHT	LOWER ICE WATERLINE IN AP	2.4	M
DRAUGHT	LOWER ICE WATERLINE IN FP	2.0	M
HEIGHT	MAIN DECK	4.4	M

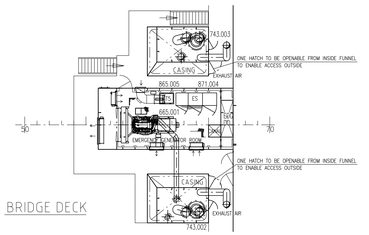


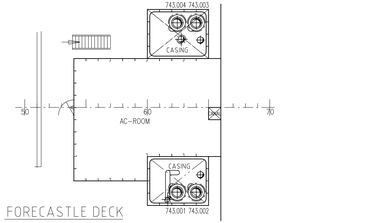


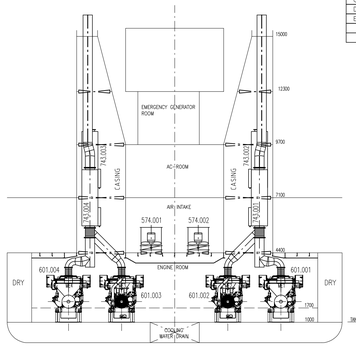












FRAME 63

Rev. Versio	Part no Field Kenttä	Alteration or remark Muutos tai huomautus	Date Pvm.	Changed by Muuttaja	Approved by Hyväksyjä
B		UPDATED	2009-07-17	Esko	MiHo
C		UPDATED	2009-08-14	MANU	MiHo
D		UPDATED ACC. TO OWNER REMARKS AND DESIGN	2009-09-30	Esko	PJJ
E		SWITCHBOARD ROOM LAYOUT, FUNNEL SIZE AND PIPING,			
		DRAWING FRAME ENLARGED, SECTION FR.63 ADDED	2009-10-09	Esko	PJJ

665.001	EMERGENCY/HARBOUR DIESEL GENERATOR SET	238 ekW, 1800 rpm	
647.001	OIL FIRED HOT WATER BOILER	350 kW	
635.501–502	AUXILIARY PROPULSION DRIVE	550 kW	
635.103–104	HYDRAULIC PUMP		
635.101–102	HYDRAULIC POWER UNIT		
635.005–006	ELASTIC SHAFT	–	
635.003–004	PUMP JET UNIT ELECTRIC MOTOR	550 kW	
635.001–002	PUMP JET UNIT	550 kW	
634.501–503	MAIN PROPULSION DRIVE	1600 kW	
634.101–103	STEERING HYDRAULIC POWER UNIT	–	
634.007–009	ELASTIC SHAFT	–	
634.004–006	AZIMUTHING PROPULSION UNIT ELECTRIC MOTOR	1600 kW	
634.001–003	AZIMUTHING PROPULSION UNIT	1600 kW	
601.001–004	MAIN DIESEL GENERATOR SET	1700 ekW, 1800 rpm	
585.002	TREATED SEWAGE TRANSFER PUMP	5 m3/h, 2 bar	
585.001	SEWAGE TREATMENT PLANT	5 m3/day	
581.006–007	HOT WATER CIRCULATION PUMP	0.6 m3/h, 1.5 bar	
581.004	UV– FILTER	3 m3/h, 5 bar	
581.001–002	FRESH WATER HYDROPHORE PUMP	3 m3/h, 5 bar	
581.003	FRESH WATER HYDROPHORE TANK	200 l, 5 bar	
579.105	ENGINE WORKSHOP AIR COOLING UNIT	7.4 kW, 1117 m3/h	
579.103	ENGINE OFFICE AIR COOLING UNIT	2 kW	
578.008	HOT WATER CIRCULATION PUMP FOR RADIATORS	5 m3/h, 2 bar	
578.007	HOT WATER CIRCULATION PUMP FOR ER VENTILATION	11.6 m3/h, 1.7 bar	
578.006	HOT WATER CIRCULATION PUMP FOR AC UNIT	3.9 m3/h, 1.3 bar	
578.005	HOT WATER CIRCULATION PUMP FOR TANK HEATING	8 m3/h, 1.6 bar	
578.004	HOT WATER CIRCULATION PUMP FOR FO PREHEATER	1.35 m3/h, 1.5 bar	
578.035	HOT WATER CIRCULATION PUMP FOR FW GENERATOR	52 m3/h, 1.2 bar	
578.001–002	ME HT HEAT RECOVERY HEAT EXCHANGER	556 kW	
576.106–107	BOW THRUSTER ROOM AIR COOLING UNIT	20 kW, 3300 m3/h	
576.101–102	PROPULSION ROOM AIR COOLING UNIT	20 kW, 3300 m3/h	
574.301–312	AIR HEATER/COOLER		
574.001–002	ENGINE ROOM SUPPLY FAN	0..67000 m3/h, 887 Pa	
573.103–104	SWITCHBOARD ROOM AIR COOLING UNIT	20 kW, 3300 m3/h	
571.101–102	AC REFRIGERATING COMPRESSOR UNIT	195 kW	
445.003	FLUE GAS FAN		
445.002	SLUDGE PREPARATION TANK	700 l	
445.001	INCINERATOR	219 kW	
441.005	WASH BASIN		
441.004	STEEL WORK BENCH		
441.003	BENCH DRILLING MACHINE		
441.002	BENCH GRINDING MACHINE		
441.001	LATHE		
437.301	HYDRAULIC UNIT FOR TOWING WINCH		
431.301	HYDRAULIC UNIT FOR WINDLASSES		
278.001	ICCP POWER UNIT	150 A, 24 VDC	
ITEM NO	DESCRIPTION	TECHNICAL DATA	

871.004	EMERGENCY SWITCHBOARD 440/230V	
871.003	MAIN SWITCHBOARD 230V	
871.002	MAIN SWITCHBOARD 440V	
871.001	MAIN SWITCHBOARD 690V	
868.001	SHORE CONNECTION CABINET	440V, 250A
867.001–002	UPS FOR AS / DRIVES	
865.005	EMERGENCY TRANSFORMER T5	440/230V, 80 kVA
865.003–004	TRANSFORMER T3–T4	690/440V, 300 kVA
865.001–002	TRANSFORMER T1–T2	690/230V, 99 kVA
814.003–004	FLEXIBLE COUPLING	–
814.001–002	FIRE FIGHTING PUMP incl. CLUTCH	abt. 1500 m3/h, 15 bar
813.002	FIRE AND DECK WASH PUMP	45 m3/h, 5 bar
813.001	FIRE AND DECK WASH PUMP	45 m3/h, 5 bar
803.006	SLUDGE COLLECTING TANK	200 l
803.004	SLUDGE PUMP	10 m3/h, 2 bar
803.003	BILGE WATER SEPARATOR	1 m3/h, 15 ppm
803.002	BILGE PUMP	65 m3/h, 2 bar
803.001	BILGE PUMP	65 m3/h, 2 bar
801.001	BALLAST PUMP	65 m3/h, 2 bar
792.101–108	IAS/FMS I/O CABINET	
792.001–002	IAS/FMS CONTROL CABINET	
761.002	FRESH WATER GENERATOR SEA WATER PUMP	65 m3/h
761.001	FRESH WATER GENERATOR	25 m3/day
743.005	EXHAUST GAS SILENCER FOR EDG / HDG	25 db(A)
743.001–004	EXHAUST GAS SILENCER FOR ME	25 db(A)
731.003–004	STARTING AIR RECEIVER	500 l, 30 bar
731.001–002	STARTING AIR COMPRESSOR	28 m3/h, 30 bar
722.009–012	ME HT WATER COOLER	5M kW
722.005–008	ME LT WATER COOLER	500 kW
722.003–004	CENTRAL FRESH WATER COOLER	1020 kW
722.001–002	CENTRAL FRESH WATER COOLING PUMP	184 m3/h, 3.2 bar
721.007–008	SEA WATER PUMP FOR ER VENTILATION COOLING	60 m3/h, 2 bar
721.005–006	SEA WATER PUMP FOR CENTRAL FW COOLER	110 m3/h, 2 bar
721.001–004	SEA WATER PUMP FOR ME FW COOLERS	70 m3/h, 2 bar
711.001	LUB OIL TRANSFER PUMP	5 m3/h, 2 bar
703.005–008	FUEL OIL COOLER	xxx kW
703.001–004	FUEL OIL PREFILTER	xxx µm
702.001	DIESEL OIL SEPARATOR UNIT	2140 l/h
701.101	RELEASE STATION FOR QUICK CLOSING VALVES	–
701.003	DIESEL OIL TRANSFER PUMP	1.4 m3/h, 2 bar
701.002	DIESEL OIL TRANSFER PUMP	30 m3/h, 2 bar
701.001	DIESEL OIL TRANSFER PUMP	100 m3/h, 2 bar
ITEM NO	DESCRIPTION	TECHNICAL DATA

P27032 SHALLOW DRAUGHT ICEBREAKING TUG (SDIBT)
STX BRAILA HULL NUMBER 740
IMO NUMBER XXX

STATUS Date Pvm. 2009-10-09
☐ 1 VERY PRELIMINARY ☒ 2 FOR OTHER DESIGN ☐ 2P FOR OTHER DESIGN
☐ 3 FOR WORKSHOP DESIGN ☐ 4 AS DESIGN ☐ 5 AS BUILT

Based on/Perustuu: 740–101–001 GA Rev.F
Port of/Satama
Repository/Arkisto

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Aker Arctic

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Title/Nimike: MACHINERY ARRANGEMENT

Program/Ohjelma: AutoCAD
AMC Project/AMC–Projekti: P27032
Paper size/Arkkikoko: A1 (594x1261)
Scale/Mitta: 1:100
Drawing number/Piirustusnumero: 740–600–001
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