

Newbuilding M/V 'CHRISTIAN D'

5.570 Dwt MULTIPURPOSE/ CONTAINER SHIP



OZMARIN GEMİ PROJE & DANIŞMANLIK

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İSTANBUL / TÜRKİYE

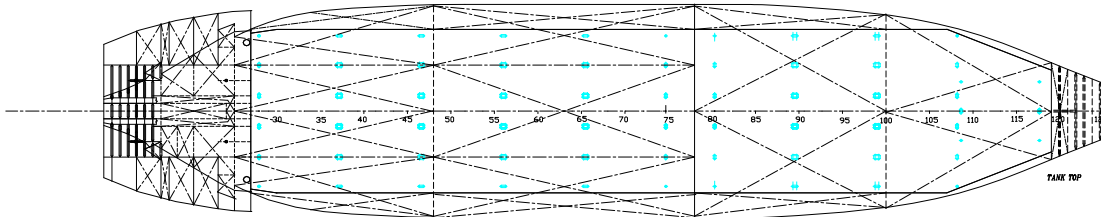
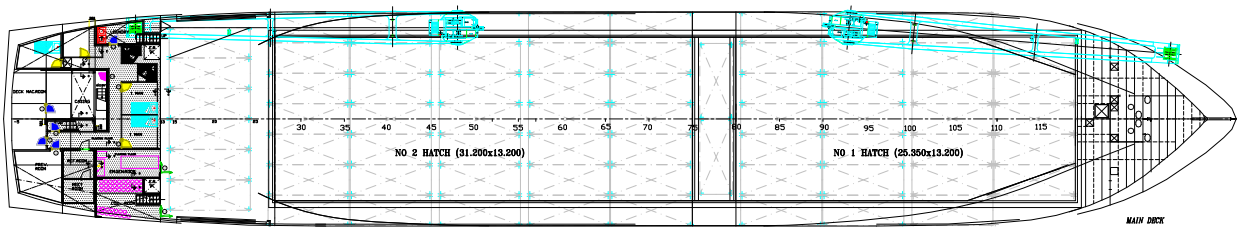
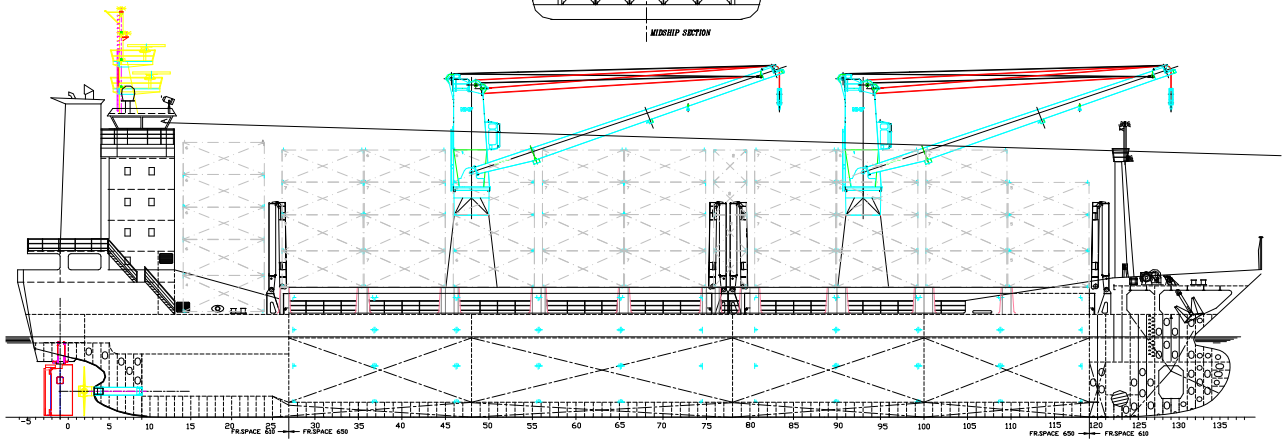
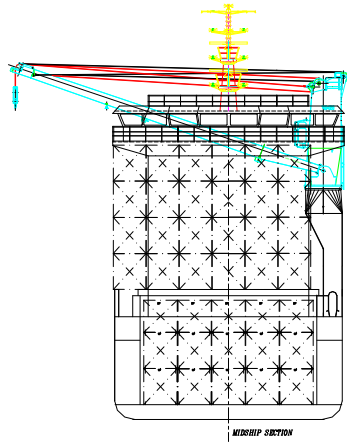
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1-M/V 'CHRISTIAN D' GERMANY
Ex. M/V 'KAPTAN ASLAN FATOĞLU' TURKIYE
(WITH CRANE 5450 DWT/390 teu Container)

SHIPYARD	:GISAN SHİPYARD / TUZLA/TURKIYE
HULL NO	:028
OWNER	:BD-Shipnavo GmbH & Co Reederi KG
CONT.DATE	:01-03-2001
LAUNCHING DATE	:28-07-2001
DELIVERY DATE	:05-08-2001
PORT OF REGISTRY :	
IMO No	: 9237876
BV Section No	:



2-M/V 'GÜNDEM 2' TURKIYE
(WITHOUT CRANE 5570 DWT/404 teu Container)

SHIPYARD	:GİSAN SHİPYARD / TUZLA/ TURKIYE
HULL NO	:031
OWNER	:Gisan İnşaat Sanayi ve Tic.Ltd. Şti.
CONT.DATE	:02-05-2002
LAUNCHING DATE	:10-01-2004
DELIVERY DATE	:12-05-2004
PORT OF REGISTRY	:İSTANBUL-TURKIYE
IMO No	: 9280122
BV Section No	:03872 L



3-M/V 'HIKMET K' TURKIYE

(WITHOUT CRANE 5570 DWT/404 teu Container)

SHIPYARD	:GISAN SHİPYARD / TUZLA/ TURKIYE
HULL NO	:032
OWNER	:İrem Denizcilik ve Tic.Ltd. Şti.
CONT.DATE	:12-03-2002
LAUNCHING DATE	:29-06-2003
DELIVERY DATE	:02-01-2004
PORT OF REGISTRY	:ISTANBUL-TURKIYE
IMO No	: 9275854
BV Section No	:



4-M/V 'MUSTAFA YAGCI' TURKIYE
(WITHOUT CRANE 5570 DWT/404 teu Container)

SHIPYARD	:YILMAZ SHİPYARD / Kdz.Eregli/ TURKIYE
HULL NO	:021
OWNER	:Yagcı Denizcilik ve Tic.Ltd. Şti.
CONT.DATE	:06-12-2003
LAUNCHING DATE	:28-11-2005
DELIVERY DATE	:12-03-2006
PORT OF REGISTRY	:ISTANBUL-TURKIYE
IMO No	: 9314545
BV Section No	: 04728 R



5-M/V 'ATAKO' TURKIYE

(WITHOUT CRANE 5570 DWT/404 teu Container)

SHIPYARD	:TORGEM SHİPYARD / TUZLA/ TURKIYE
HULL NO	:086
OWNER	:Atako Uluslararası Taş.Den. ve Tic.Ltd. Şti.
CONT.DATE	:06-09-2004
LAUNCHING DATE	: 2006
DELIVERY DATE	: 2006
PORT OF REGISTRY	:ISTANBUL-TURKIYE
IMO No	:
KR Section No	:



6-M/V 'ALI AKAY' TURKIYE
(WITHOUT CRANE 5800 DWT/404 teu Container)

SHIPYARD :YILDIRIM SHİPYARD / TUZLA/ TURKIYE
HULL NO :107
OWNER :Akaylar Denizcilik Sanayi ve Tic. A. Ş.
CONT.DATE :16-12-2004
LAUNCHING DATE : 2006
DELIVERY DATE : 2006
PORT OF REGISTRY :ISTANBUL-TURKIYE
IMO No : 9358759
BV Section No :08075 E



PRINCIPAL PARTICULARS

MAIN DIMENSIONS	no:1	No:2,3,4,5	No:6
Lenght Overall	94.720 m.	94.720 m.	94.720 m.
Lenght Between Perp.	84.230 m.	84.643 m.	84.827 m.
Breadth (mld)	17.000 m.	17.000 m.	17.000 m.
Depth to Main deck (mld)	8.300 m.	8.300 m.	8.600 m.
Draught (desing)	6.549 m.	6.555 m.	6.800 m.

TONNAGE	no:1	No:2,3,4,5	No:6
Displacement	7.505 t.	7.565 t.	7.900 t.
Deatweight (at dsg. Draught)	5.408 t.	5.567 t.	5.800 t.
Light Ship	2.097 t.	1.999 t.	2.100 t.
Gross tonnage (abt)	3726 t.	3726 t.	t.
Net tonnage (abt)	1840 t.	1840 t.	t.

CAPACITY	no:1	No:2,3,4,5	No:6
Cargo Holds capacity	6.468 cbm.	6.654 cbm.	6.870 cbm.
Marine Diesel oil	64 cbm.	96 cbm	96 cbm
Heavy Fuel oil	424 cbm.	455 cbm.	455 cbm.
Fresh water	93 cbm.	155 cbm.	155 cbm.
Water Balast	1.861 cbm.	1.828 cbm.	1.828 cbm.
Lub.Oil Tanks	11 cbm..	12 cbm..	12 cbm.
Other Tanks	49 cbm.	58 cbm.	58 cbm.

MACHINERY PLANT

Main engine	M.A.K. 6M32 2880 Kw, 600 rpm.
Aux. Engine	3x228 Kw. 3x380 V 50 Hz
Emergency generator	1x102 Kw. 3x380 V 50 Hz
Boiler	400 Kw, thermal fluid heater
Bow thruster	300 Kw, hydraulic driven CPP
Shaft Generator	550 Kw 380 V 50 Hz.

SPEED AND CONSUMPTION

Speed (95% mcr)	13.5 kts Laden
Fuel consumption & sea condition) (up to beafourt F 2/2 and no advers current)	12.0 t./day Ifo 180 Cst–No MGO at sea (All in good weather

PORT CONSUMPTION

Idle 1.0 Tons MGO. (Crane working 2.0 Tons.)

CARGO AREA (HOLDS ,HATCH COVERS &DECK)

- **Cargo gear** :2X40(32) MT ,24(28) Mt.Side Cranes portside.
- **Nr of hatches/Holds** :- 1 box holds of 13,20x25.34/26.65
- 2 box holds of 13.20x31.20/32.50
- **Hold capacity** : 6654.27 m3 (Approx. 234.993. cbft Grain & 225.593 Bale)
-Hold No:1 2852.44 Grain /2738.34 m3 Bale
-Hold No:2 3801.83 Grain /3649.76 m3 Bale
- **Hatchcovers** : Folding type -1 hatch two folding fore & Aft.side
-2 hatch two folding fore & Aft.side & one stacking covers
- **Total Container Intake** :Alvays subject to vessel'sstrength and stability permissible weights and/or stability / visibility,

CAPACITY	no:1	No:2,3,4,5	No:6
On hatchs/deck : Teus/Feus	257/91(75)	275/103(62)	275/103(62)
In holds : Teus/Feus	126/45(36)	129/54(21)	129/54(21)
Total : Teus/Feus	383/136(111)	404/157(83)	404/157(83)

- **Container stability** :
 - About **TEU of 12 tons**, homogeneously loaded on 6.55m draft
 - About **222 TEU of 14 tons**, VCG %40,homogeneously loaded on 6.55m draft
 - About **TEU of 14 tons**, VCG %50,homogeneously loaded on 6.55m draft
 - About **TEU of 20 tons**, homogeneously loaded on 6.55m draftPlease note that intakes are always subject to vessels,Inclining experiment/stability/trim and permissible weights.
- **Stack weight in holds** : 20'/40' stack Max. 90/120 Mton-3 Tiers (2x9'6''&1x8'6'')
- **Stack weight on hatchs** : 20'/40' stack Max. 28/35 Mton-4 Tiers
- **Stack weight on e.r.deck** : 20'/40' stack Max. 40/60 Mton-5 Tiers
- **Tank top strength** : 12 t/m2
- **Hatch covers strength** : 1.75 t/m2
- **Cell guides** : no
- **Reefer plugs** : 50 Total (380 volt-50 Hz) Fitted with reefer monitoring system.
- **Dangeraous cargo** : All Cargo Holds Equipped for Dangeraous cargo 6 Charge Per hour (empty hold)
- **Fittings** : The vessel is equipped with all necessary container fittings for the full capacity.

GENERAL

Type Of Vessel:Self sustained single deck,Double skinned,Box shaped container vessel.Isc containers of 20',40' and length as well as 8',8'6",9'6" Height, Grain bulk cargo suitable for grab discharge.

The ship to be build in accordance to this outline specification and general arrangement drawing no. B 01 01.

The ship to be an double bottom and double sides.
2 cargo holds to be arranged.

The water balast to be carried in combined double bottom and wing tanks and in the fore peak.

Superstructure with deckhouse aft to be arranged for accommodation.

The deadweight to include fuel oil bunker, freshwater, crew and store and spare parts beyond the requirements of the Class. The deadweight is calculated in salt water with a specific gravity of 1.025 ton Per m³.

Class and regulation

The vessel to be build according to the regulations and under the survey of B.V.(No:1,2,3,4&6) & K.R.(No:5) with following notations:

Built to B.V. I +HULL GENERAL CARGO SHIP ,UNRESTRICTED NAVIGATION, EQUIPPED FOR CARRIAGE OF CONTAINER strengthened for heavy cargoes, tank top strengthened for loading and unloading grab, certified container securing arrangements.

HULL STRUCTURE

Hull material to be of mild steel.

Metarial Protection

Balast tank : To be of Jotun's Balloxy HB Coated in thickness of 2x150 microns + cathodic protection by Jotun

F. water tank : To be of Jotun's Jotacote 412 coated in thickness of 2x200 microns.

TYPE OF COATING : Tin free and fit for ice class 1b for 60 months of drydock intervals.

EQUIPMENT FOR CARGO

Deck Cranes

2X40 MT ,24,5 Mt.Side Cranes portside.Electro hydraulic driven system (Only hull no:1)

2 SWL 1.5 tons outreach 3.5 m.

Electro hydrolic, self-acting-Life raft / rescue boat / provisions

SHIP INSTALLATION **MACHINERY COMPONENTS**

Main engine

1 x M.A.K. Diesel Engine
Type 6M32C Four stroke
2880 Kw at 600rpm. Rotating clockwise
With Centa flexible coupling.

Red.Gear & Popeller

1 x ZF W43000 NC PT05

Propeller

Propeller / Shaft / Stemtube CP propeller
Medium skewed with 4 blades, Dia : 3800mm
Rotating anti-Clockwise
Propeller hub type VB in Ni-al-bronze

Rudder – steering gear

HATLAPA type R4L250-45-144 kNm.
Four cylinder type.

Bow thruster

ROLLS-ROYCE Transverse thruster.
Type 45 – TV, 300 kW, electrical motor driven.

Shaft Generator

1 x LOREY SOMER,LSA 491-M-4P
PTO 550 kW at 1500 rpm

Bollers

WIESLOCH or AALBORG
1 x 400 Kw thermal fluid heater
MDO fired system
1 x 500 kW economiser (incl. Dump cooler)
Boiler fully automated control system

Diesel generator

3 x 228 kW by DEMP (engines : D2866L from MAN; alternators ACM434E)

Emergency generator

1 x 102 kW by DEMP (engine: D2866 E from Man: alternator ; UCM274E)

SYSTEM FOR MACHINERY MAIN COMPONENTS

Piping material generally all system:

<u>Pipes</u>	<u>Material</u>	:
Seawater cooling pipes	Galvanised steel	
Freshwater cooling pipes	Galvanised steel	
MDO in engine room	Steel	
Fuel oil pipes	Steel	
Lub oil pipes	Steel	
Air, filling and sounding pipes	Galvanised steel	
Bilge pipes	Galvanised steel	
Ballast pipes	Galvanised steel	
Fire pipes	Galvanised steel	
Hydraulic pipes	Steel	
Compressed air 30 bar	Seamless steel	
Compressed air 7 bar	Steel	

Fuel oil system

Fuel system consists of;

- 2 HFO and 1 MDO purifiers, by Alfa Laval
- booster module, by Alfa Laval
- 2 HFO and 1 DO transfer pumps, by Bombas Azcue
- day and settling tanks and sludge tank.

Lub oil system

Lub oil system consist of;

- 1 LO purifier, by Alfa Laval
- 1 LO transfer pump, by Bombas Azcue
- 1 LO pump for M/E, by Bombas Azcue

Cooling system

Cooling system consist of;

- 1 x M10 BFM (for M/E LT), 1 x M10 MFM (for M/E HT) and 1 x M10 BFM (for R/G) coolers
- 2xSea Cooling pump 2 x 135 CubM/h at 2.35 bars, 1750 rpm.
- HT FW cool.pump 1 x 90 CubM/hr at 4.0 bars, 2950 rpm.
- LT FW cool.pump 1 x 80 CubM/hr at 4.0 bars, 2950 rpm.
- Preheating circ.pump (type -----) 1 x --- CubM/hr at ----- bars, ----- rpm.
- 3xPump of Aux D/G SW cooling pump 3 x 10 CubM/h at 2 bars, 2950 rpm.

Coolers from Alfa Laval are of titatium plate type and the pumps from Bombas Azcue are of bronze impeller/casing.

Compressed air system

J.P.SAUER&JOHN

2 x WP 33L start air compressor

38.0 cbm/hr at 30 bars, 2x500 l. air bottles

Navigation equipment

The following navigation equipment to be delivered and installed;

- JRC Gyro / Autopilot
- 2 x ARPA, of which one will be of S band
- Speed log, Wing speed & direction, Echo sounder, DGPS
- Voyage data recorder, Weather fax receiver, Navtex, etc.

Anchor & chains

Anchor chains:495 mt. Ø50 mm Stud link chain cable,steel grade K2.

Anchor :2 stockless bower anchors weight per anchor 3060 Kg.

Tow line :200 mt. steel or fibre rope ,min. Braking strength 603 Kn.

Mooring line :4x180 mt. steel or fibre rope ,min. Braking strength 234 Kn.

Windlasses

2 * 80 kN electro hydraulic windlasses equipped with warping drum / rope storing drum/ for chain ø50 mm K2

Mooring winches

2 * 80 kN electro hydraulic mooring winches equipped with warping drum / rope storing drum

EQUIPMENT FOR CREW

Accommodation located at aft with the following rooms / compartements

Wheelhouse at bridge deck (combine navigation / communication)

- (1) Wheelhouse module wet unit
- (1) Single cabin with module wet unit
- (1) Single cabin for hospital with module wet unit
- (1) Mess room at accommodation deck 1
- (1) Public module wet unit at accommodation deck 1
- (1) Galley with cooking apparatus at accommodation deck 1
- (1) Pantry with washing / servicing apparatus at main deck
- (2) Fridge rooms for meat / vegetable at poop deck
- (1) Dry provisions room with climate ventilation at accommodation deck

Life saving equipment

One rescue boat GEPA type. G-RB1, with CE marking

Other safety and emergency equipment to be fitted according to SOLAS 74 Regulations.

Ventilation air condition and heating system

Heinen Hoppmann - The Netherlands

Complying with Solas, ABS rules / regulations

Design condition.....Summer -35 deg C, 70% relative humidity (RH)-(OUTSIDE)

-28 deg C, 50% RH-(INSIDE)

-Sea water temp. 32 deg C

.....-Winter -Minus 20 deg C-(OUTSIDE)

-20 deg C-(INSIDE)

-Sea water temp. 0 deg C

-Wind speed 16m/s

Sanitar system

HAMWORTHY

1 X ST2A

Equipped with vacuumators.