

THE CHINA NAVIGATION CO. LTD.



# M.S. AOTEAROA CHIEF

981 TEU Geared Multi-Purpose Containership

## BUILT

October 1990  
Miho Zosen, Shimizu, Japan  
Lengthened November 2005

## PORT OF REGISTRY

Hong Kong

## CLASS

Lloyds + 100A1 LMC UMS Containership  
(No. 2 & 3 holds hold suitable for general cargo)  
IMO No. 8810449  
Off. No. HK- 715751

## DIMENSIONS

Length O.A. : 158.055m  
Length B.P. : 148.305m  
Breadth Mld. : 22.00m  
Depth Mld. : 11.00m  
Summer draft : 7.981m  
Summer Dwt. : 13387.20mt  
GRT : 10352.00  
NRT : 5804.00  
GRT Suez : 10,837.48  
Panama :  
NRT Suez : 8,774.67  
Panama : 9,305.0

## CALL SIGN

VRRB

## COMMUNICATIONS

Satcom Fleet 77 : No. 764570822, 764570823, (Tel)  
Fax : No. 764570825, (Fax)  
Satcom mini M : No. 762711595, (Tel)  
Satcom C : No. 447706010/11  
Email : aotearoachief@cnco.amosconnect.com

## CONTAINER CAPACITY DETAILS

No.'s 1 and 4 holds are fully cellular, with cellguides for 20' I.S.O. containers. There are 210 reefer points on deck.

Cargo hold No. 1 certified for the carriage of IMDG Class 1.4(S), 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 6.1(A), 6.1(B), 6.1(C), 6.1(D), 8(A), 8(B), 8(C) & 9. This hold fitted with forced fan ventilation (2 air changes per hour).

Cargo holds 2, 3 & 4 certified for the carriage of IMDG Class 1.4(S), 2.2, 3.3, 4.1, 4.2, 4.3, 5.1, 8(A), & 8(D)

Nos. 2 & 3 holds are multi-purpose spaces without cellguides but each hold has 8 off-side folding flush fitting tweekdecks. Container stowage baseplates are provided on the tanktops and tweekdecks. Removable beams and pillars, 2 sets are provided athwartships to support the tweekdecks.

	20ft	40ft
Capacity Hold	378 TEU	94 FEU + 190 TEU
Deck	603 TEU	270 FEU + 61 TEU
<b>Total</b>	<b>981 TEU</b>	<b>364 FEU + 251 TEU</b>

TEU capacity with homogenous load-	12T	14T	16T
IMO criteria and approved dep. cond. 98% Bunkers & arr. cond. 15% Bunkers	740	699	655

## HATCH COVERS AND DECK STRENGTHS

Holds No. 1 & 4 – 12 off, 20ft wide single-skin, McGregor pontoon covers, each 20' bay has dedicated lids, No. 2 & 3 cargo space weather deck hatch covers are of pontoon type, each hold consist of 2 panels each side (P & S) with swing seal joint on ships center line. No. 2 & 3 Hold 'Tween Deck hatch consist of 4 side-folding single skin covers port and starboard hydraulically operated. All lids are non-sequential opening and stacking. Heaviest lid weight 31 mt.

## Stackweights:

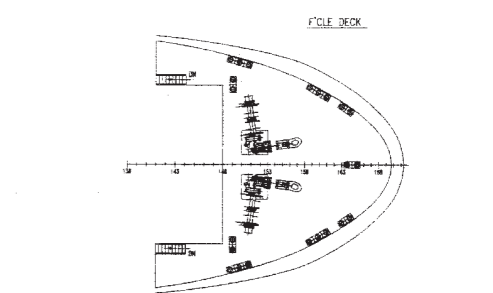
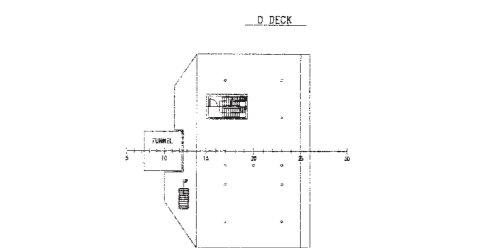
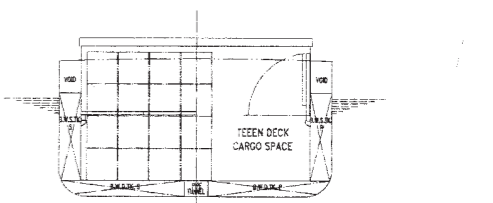
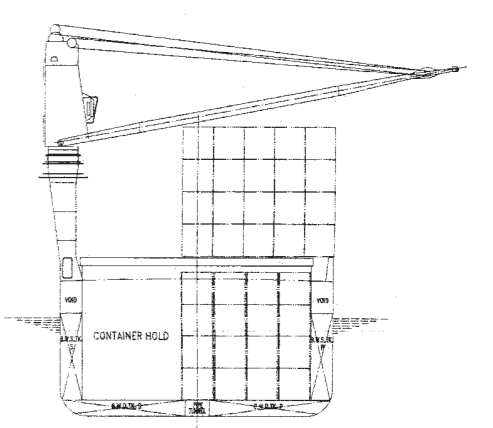
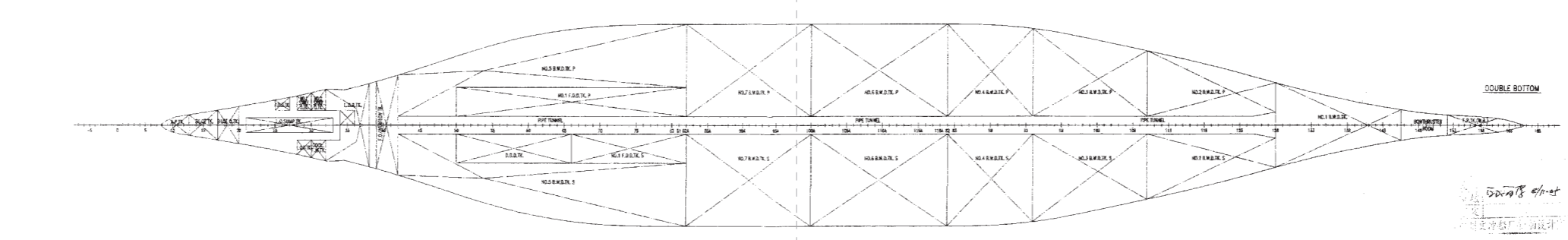
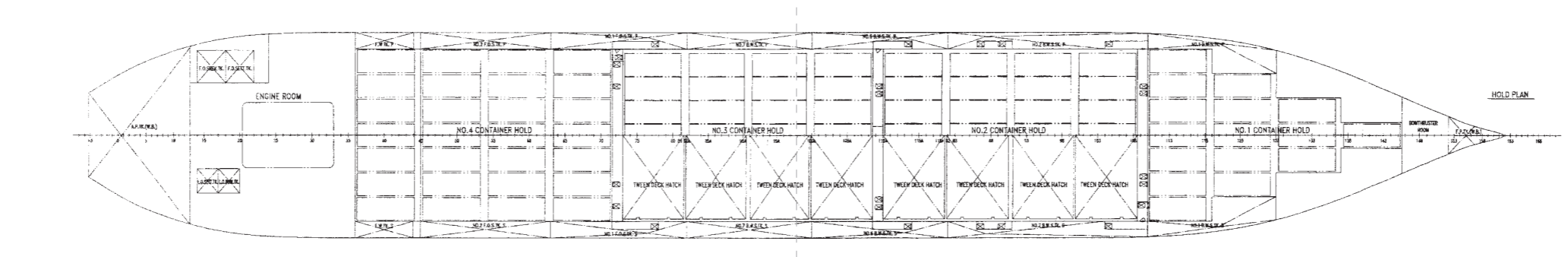
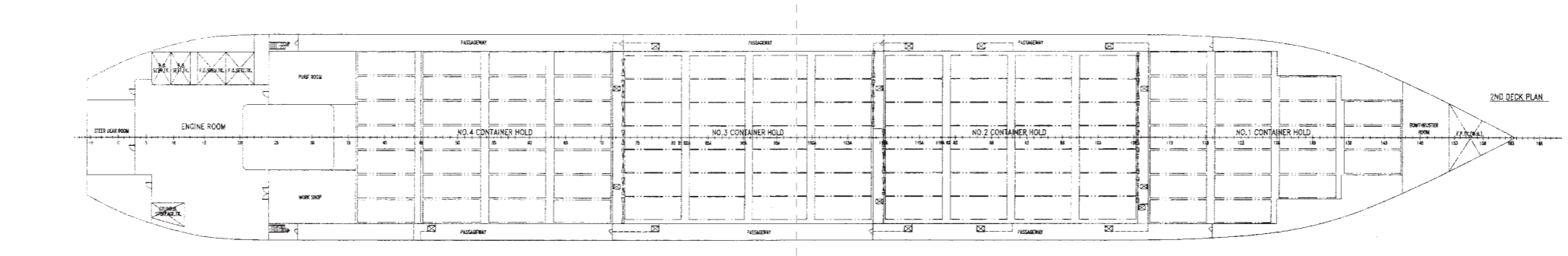
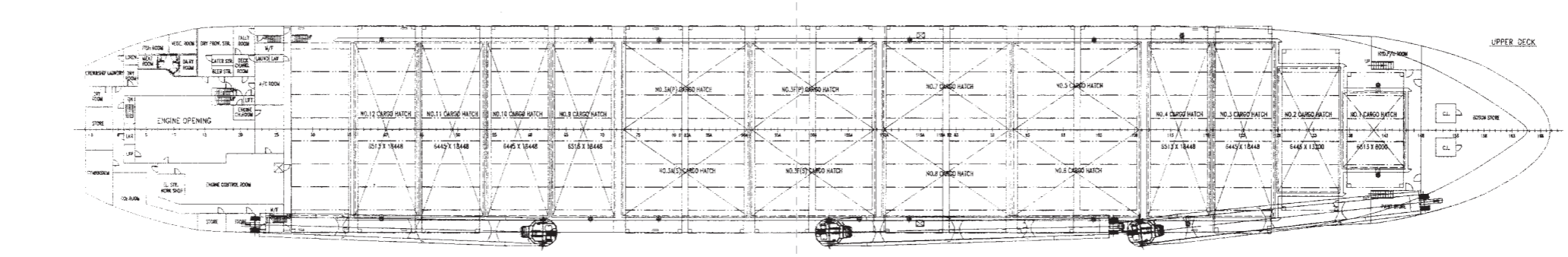
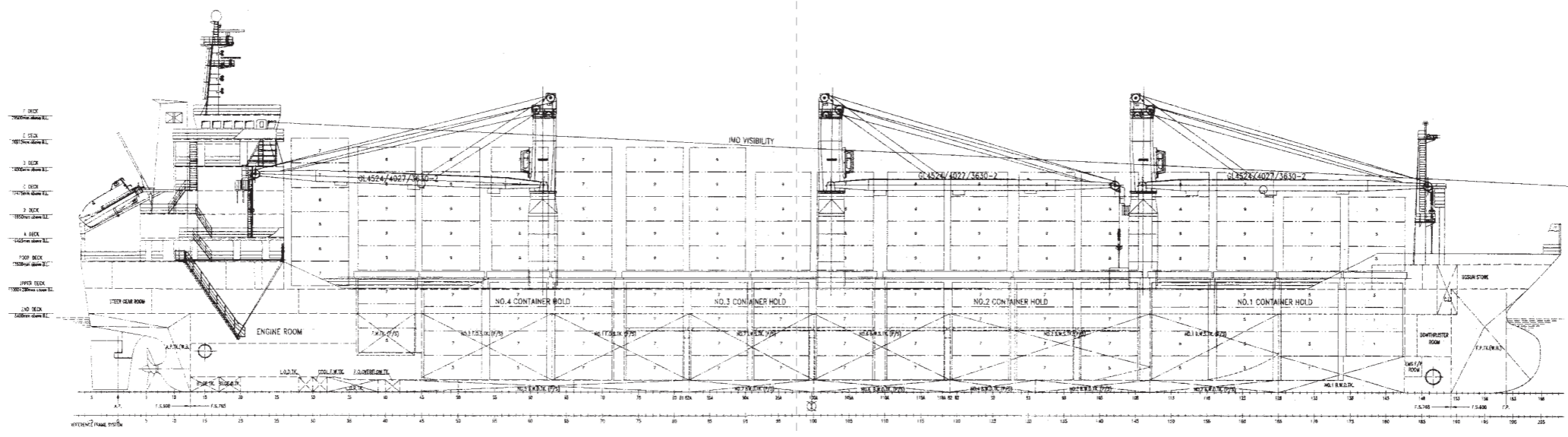
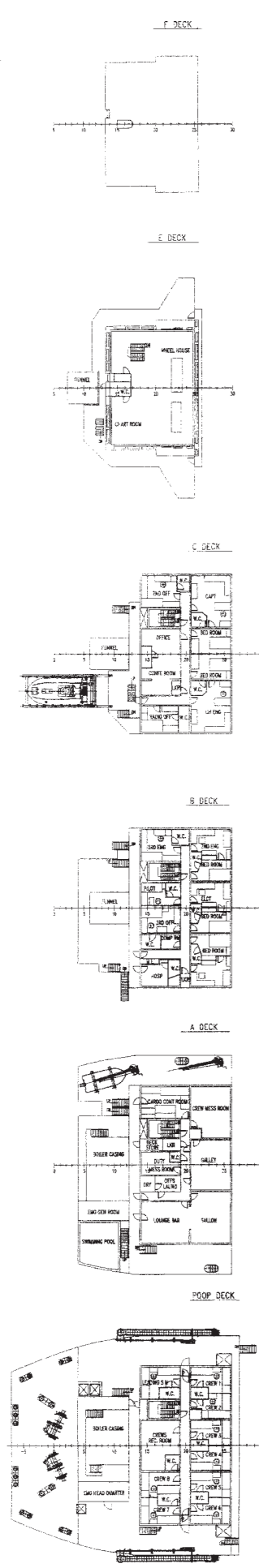
Hatchcovers:	No. 1 & 4 holds	
Container Load	TEU (90mt) FEU (90mt)	
Uniform Load	1.75 mt/sq.m.	
Tweendeck:	No. 2 & 3 holds:	
Container Load	TEU (40mt) FEU (60mt)	
Uniform Load	3.7 mt/sq.m.	
Tanktop:	No. 1 & 4 holds	No. 2 & 3 holds
Container Load	TEU (120mt) —	TEU (120mt) FEU (150mt)
Uniform Load	9.5 mt/sq.m.	13.5 mt/sq.m.



# M.S. AOTEAROA CHIEF

## 981 TEU Geared Multi-Purpose Containership

SC4351C-100-04



### PRINCIPAL PARTICULARS

LENGTH (O.A.)	158.055 m
LENGTH (P.P.)	148.305 m
BREADTH (MLD)	22.00 m
DEPTH (MLD)	11.00 m
SUMMER DRAFT EXTREME (INCLUDING 16mm KEEL)	7.981 m
DEADWEIGHT (AT SUMMER DRAFT)	abt. 13,387.20 mt
CONTAINER IN TAKE	IN HOLD 378 TEU
	ON DECK 603 TEU
	TOTAL 981 TEU
MAIN ENGINE	MAN B&W 7L42MC 8,120 ps
COMPLEMENT	19 Persons
CLASSIFICATION	LR + 100A1, + LMC, UMS, "CONTAINER VESSEL"
NO. 2, 3 HOLDS ARE SUITABLE FOR GENERAL CARGOES	

**AOTEAROA CHIEF**

13550DW MPC VESSEL

DESIGNED BY: 程卓  
CHECKED BY: 杨军  
APPROVED BY: 万水生  
DATE: 27/7/2008

GENERAL ARRANGEMENT PLAN  
总布置图

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PAGE NO. 1 / 1  
SCALE: 1:200

SHANGHAI MERCHANT SHIP DESIGN & RESEARCH INSTITUTE  
上海商船设计研究院

LENINGEN DESIGN 船壳设计

500018 4/1-01

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比例尺: 1:200

## SPEED AND CONSUMPTION

At maximum draft 7.981m, 13,387.2 dwt, about  
24 mt/day at 15.50 kts

At loading draft 7.191m, 11,018.6 dwt, about  
24 mt/day at 16.00 kts

Generator consumption (MFO, same as main engine)

In port, idle : 1.7 MT/day  
In port with 2 cranes : 2.5 MT/day  
At sea, no reefers : 2.7 MT/day  
At sea, with 50 reefers : 3.0 MT/day

Boiler consumption (MFO, same as main engine)

At sea : Nil  
In port : 1.8 MT/day

Unifuel operating basis 380cst at 50C basis ISO 8217 RMG  
35 Beaufort 3, sea state 3.

## CARGO HANDLING EQUIPMENT

Cargo Gear: Three Macgregor deck cranes GL4524/4027/  
3630, SWL 45MT-36MT, offset to Starboard with outreach to  
starboard of 30m, and outreach to port of 8m.

Crane details:

SWL for cranes : 3 - 24m = 45mt  
3 - 27m = 40mt  
3 - 30m = 36mt

Lifting height : 35m (total)

Max operating heel/trim : 5/2 deg.

Ancillary cargo equipment:

3 x 20ft. semi - automatic spreaders 36mt SWL

## BALLAST TANKS

Water ballast : No 1-7 D.B. Tanks  
: No 1 & 2 Side tanks  
: Fore & Aft Peak Tanks

Total ballast : 3437.9 cu.m.

Ballast Pumps : 2 x 250 cu.m/hr, No 7 Side Tks fitted  
with heeling system. De-ballast time  
approx 7 hrs Exc. No. 7 side tks.

## MACHINERY

Main Engine : One 'Mitsui' B & W Type 7L42MC MK3  
diesel engine 2 stroke Cycle, single  
acting, direct reversing crosshead,  
7 cylinders. Max. Continuous rating  
8,120 BHP @168RPM

Propellor : One 'Nakashima' NI-AI-Bz Keyless,  
4 rt. Hand blades. Diam. 4,520 mm.  
Pitch 3,420 mm

Bow Thruster : Model TC-165N. Propellor diam.  
1,650 mm. 359.2 rpm, 4 blades. Thurs  
10.0 t., 690 Kw

Stern Thruster : Model TC-145N. Propellor diam.  
1,450 mm. 377.1 rpm, 4 blades. Thrust  
7.8 t., 530 Kw

Diesel Generator : Three 'Ssangyong' L23130 MAN B &  
2 Holeby diesel engines, Driving  
900 KVA 60 Hz 440V alternators.

## COMPLEMENT

Officers : 8  
Crew : 8  
Normal Complement : 19  
Extra : 6 (pilot + 5 spare)  
Total Berths : 22  
Max LSA capacity : 25

## TANK CAPACITIES

MFO : 914.9 cu.m. @ 96%  
MDO : 62.2 cu.m. @ 96%  
FW : 154.12 cu.m. @ 100%  
Ballast : 3484.3 cu.m. @ 100% including  
No. 7 heeling side tanks.

## FEATURES TO NOTE

- 1) Nos 2 & 3 holds are non cellular and fitted with 8 off side folding, hydraulically operated flush fitting tweendecks. The space is ideal for breakbulk and project type cargo.
- 2) The vessel has powerful bow and stern thrusters with bridge wing controls enabling rapid berthing/unberthing routinely without tugs.
- 3) The ballast and fuel tank arrangements have been designed to help maintain an even keel throughout the voyage, to maintain speed and minimize the effect of free surface.
- 4) A high capacity auto heeling system is fitted to help maintain the ship upright during cargo operations.
- 5) The accesses to holds and cranes comply with AWWF rules.
- 6) An integrated loading, lashing and cargo management computer programme is fitted which is used to minimize lashings and keep track of containers. The programme enables the vessel to be self sufficient in container planning if required, using ship to shore high speed data links.
- 7) Pumping and monitoring of ballasting, hold bilges, and the auto heeling system is controlled from the deck office, which is fitted with remote draft and ballast tank level gauges.
- 8) The vessel has been strengthened with No. 2 & 3 holds suitable for general cargos.
- 9) A forecastle breakwater is fitted to protect the forward container stacks from heavy seas.
- 10) A fully networked shipboard administration system is fitted, enabling the vessel to export/import data via an Eicon digital modem (64K) and Fleet 77 satellite system.