



الشركة السعودية للملاحة والخدمات البحرية
SAUDI SHIPPING & MARITIME SERVICES CO. LTD.
شركة ذات مسؤولية محدودة - رأس المال المدفوع ٦٥.٠٠٠.٠٠٠ ريال مدفوعة بالكامل

Marwah-8

IMO No. 9106338



PRINCIPAL PARTICULARS	
Ship Name	Marwah-8
Kind Of Ship	Oil Tanker
Flag	Saudi Arabia
Port Of Registry	Jeddah
Official No.	SA 2724
Call Sign	HZ5375 (MMSI No. 403215980)
NK Class No.	NK 950554
Classification Characters	NK coastal – NS* (TOB) (ESP) MNS* -
Gross Tonnage	4,228 T
Net Tonnage	1,926 T
Deadweight	6,506.11 T
Light Weight	2,178.57 T
Freeboard Summer	2.562 m
Draught Summer	6.764 m
Equipment No.	870
LOA	110.00 m
Lreg	102.32 m
Lpp	102.00 m
Breadth	16.06 m
Depth	9.30 m
Built	Fukuoka Shipbuilding Co., Ltd., S.No. F-1183
	Keel Laid 26 August 1994
	Launch 19 October 1994
	Delivery 10 February 1995
Type Of Hull	Well decker, machinery space and accommodation located aft, bulbous bow, transom stern
Trial Speed (max)	13.147 knots
Service Speed (85% MCR, 15% SM)	12.20 knots
Endurance	7,000 sea miles



PARTICULARS FOR HULL DEPARTMENT

Capacity of cargo tanks (m3)

No.	P	S	Total
1	352.059	346.651	698.710
2	795.909	791.058	1,586.967
3	857.219	851.718	1,708.937
4	856.485	851.477	1,707.962
5	664.327	664.648	1,328.975
Total	3,525.999	3,505.552	7,031.551
Slop	176.942	177.272	354.214
G.Total	3,702.941	3,682.824	7,385.765

Capacity of ballast tanks (m3)

No.	Location (Fr. No.)	Capacity	
FPT	131-F/E C	170.85	
No.1 WBT	115-130 C	354.82	
No.2 WBT	105-115 F-C	285.49	
	95-105 A-C	284.69	
No.3 WBT	85-95 F-C	271.54	
	75-85	A-P	136.66
		A-S	136.66
No.4 WBT	65-75 F-C	273.48	
	55-65	A-P	136.60
		A-S	136.60
No.5 WBT	47-55 F-C	220.43	
	39-47 A-C	229.11	
Total		2,636.93	

Capacity of fuel oil tanks (m3)

No.	P	S	Total
No.1 FOT	129.86	129.86	259.72
No.2 FOT	51.82	46.34	98.16
Total	357.88		

Capacity of diesel oil tanks (m3)

No.	P	S	Total
DOT	22.64	22.64	45.28
Total	45.28		

Capacity of drinking water tanks (m3)

No.	P	Total
AET	76.95	76.95
Total	76.95	

Capacity of fresh water tanks (m3)

No.	P	S	Total
DOT	61.22	61.22	122.44
Total	122.44		

Capacity of tank cleaning fresh water tanks (m3)

No.	P	S	Total
DOT	102.89	104.37	207.26
Total	207.26		

Capacity of other tanks (m3)

Tank	Total
L.O. S.T.	8.67
S.B.L.O.D.T	2.72
No.1 M/E L.O. SET. T	6.37
No.2 M/E L.O. SET. T	5.63
CYL. O. STOR. T.	9.10
M/E L.O. STOR. T.	3.81
B.O.T.	6.05
B.T.	6.05
H-F.O. SERVICE TANK	3.00
H-F.O. SETTLING TANK	3.00
D-F.O. SERVICE TANK	1.50
D-F.O. SETTLING TANK	1.50



Maximum Speed (Official Sea Trial)	13.147 knots			
Economical speed (85% MCR):	12.642 knots			
Fuel Oil Consumption (Economical)	8.854 t/day			
Range	7,000 miles			
Bower Anchor	Stockless anchor 2,640 kg x 2 pcs (Kiyomoto Iron & Mach. Works)			
Anchor Chain	Electrically welded G-2 46 mm ϕ x total 467.5 m (Kinugawa Chain Mfg.)			
Windlass	Electric-hydraulic x 2 sets, with one gipsy wheel , two hawser drums and one warping head for each windlass, At gipsy wheel: 9 t x 9 m/min, At hawser drum 5 x 15 m/min (Hydraulic pump 45 KW x 1 set)			
Mooring Winch	Electric-hydraulic x 2 sets, with two hawser drums and one warping head for each mooring winch, 5 t x 15 m/min (Hydraulic pump 30 KW x 1 set)			
Steering Gear	Electric-hydraulic 17 T-m 11 KW x 1 set for schilling rudder (torque 17 t-m, hydraulic pump 11 KW x 2 sets)			
Life-Saving Equipment	Life Boats	Totally enclosed type life boats with water cooled diesel engine for 20 persons x 2 sets		
	Rescue Boat	STBD life boat is used as rescue boat		
	Inflatable Life Raft	20 persons x 2 sets		
	Lifebuoy	8 pcs		
	Life jackets	24 sets		
Firefighting Equipment	Cargo Area	Deck foam system (tank 4500 l)		
	Cargo Pump Room	Fixed CO2 fire extinguishing system, sea water, portable fire extinguisher		
	Engine Room	Fixed CO2 fire extinguishing system, sea water, portable fire extinguisher		
	Emergency Fire Pump	D/E driven centrifugal pump 45 m ³ /h x 50 m (TH) x 1 set in steering room		
Ventilation Fan	Location	Capacity (t/hr)	Motor (KW)	Number (set)
	Galley	40	0.4	1
	Sanitary Space	10	0.75	1
	Cargo Pump Room, Gas Free Fan Room, Safety Equipment Store	45	11.0	1
	Cargo Equipment Store & Cofferdam	20	1.5	1
	Steering Gear Room, Laundry & Drying Room	10	0.2	1
	CO2 Bottle Room	10		1
Airconditioning System For Accommodation	Type	Package type (Daikin US 15 FA(TO) x 1 set		
	Capacity	55,000 kcal/h		
	Compressor	11 KW x 1 set		
	Fan	3.7 KW x 1 set		



	Compartment	Volume (m3)	Maintained Temp. (°C)	Cooling System
Refrigerated Provision Chamber	Meat & Fish	5.0	-18	Grid coil
	Vegetable	5.4	+2	Diffuser fan
	Lobby	3.7		Grid coil (return line)
Refrigerating Unit	Refrigerating Machine	Electric R-22 direct expansion type, 1.5 KW x 2 sets		
Cargo Pump And Ballast Pump	Cargo Pump	D/E driven horizontal screw pump (Taiko CSL-500MHA), 500 m3/h x 100 m (TH) x 1,200 rpm x 2 sets (Material: casing FC, screw SUS 13, shaft SUS 304) Stripping/tank cleaning pump: Electric motor driven horizontal screw pump (Taiko CSL-100MH), 100 m (TH) x 1,800 rpm x 1 set (Material: casing FC, screw and shaft SUS 304) (Electric motor 60 KW x 1,800 rpm)		
	Main Ballast Pump	Motor driven centrifugal type (Taiko EHS-151C), 150 m3/h x 25 m x 2 set		
	Cargo Hose Handling Crane	Electric-hydraulic SWL 3.0 T, hoisting speed 12 m/min, slewing speed 0.5 rpm, Jib length 12 m, Common use of hydraulic pump unit for windlass		
Navigational And Radio Equipment	Gyro Compass & Auto Pilot	Tokimec PR-8257-HE-V13		
	Magnetic Compass	Tokimec SH-165A reflection type		
	Radar	Tokimec BR-2510C (X-band) 12* PPI 25KW 96miles		
		Tokimec RASCAR2500M-S314 (X-band) 12* PPI 30KW 96miles		
	Echo Sounder	JRC, JFE-570S 200KHz 450m		
	Doppler Speed Log	Tokimec, TD-201		
	Radio Telegraph	JRC JSS-710		
		Main Transmitter	NSD-71 800W	
		Main Receiver	NRD-740 90K-29, 9MHz	
		DSC Watch Receiver	NRD-720	
		Watch Keeping Receiver		
	VHF Radio	JRC JHS-32B 57 ch. 25W x 2 sets		
	GPS	JRC JLR6000 MKII		
	EPIRB	JRC JQE-3A 406 MHz		
	Radar Transponder	JRC JQX-20A x 2 sets)		
Navtex Receiver	JRC, NCR-300A			
Two-Way VHF Radiotelephone	JRC, JHS-7 x 4 sets			
Inmarsat-C	JRC JUE-75A			
Inmarsat-A	JRC 45AMII			



PARTICULARS FOR ENGINE DEPARTMENT	
Main Engine	B&W 6S26MC MARK V x 1 set, Cyl. bore 260 mm x stroke 980mm, (Eng. NO. MW 6018) with T/C MHI MET 30SR (Ser. No. 60071) (3,270 BHP 2,438 KW) Fuel consumption ratio 132 g/ps.h
Propeller	Aero foil 4 bladed 25° skewed fixed pitch type x 1 set
	Material Nickel-Aluminum bronze
	Diameter 3,000 mm
Propeller Shaft	3,750 mm x 300 φ
Intermediate Shaft	5,040 mm x 290 φ
Auxiliary Boiler	Vertical smoke tube type, 3,000 kg/h. 6 kg/cm ² x 1 set
Exhaust Gas Economizer	Forced circulating multi-tube type, 300 kg/h, 6 kg/cm ² x 1 set
Main Generator Engine	Yanmar 6LAAL-UTN (Eng. No. 6043,6044 & 6045), 360 PS x 1,200 RPM x 3 sets (bore 148 mm x stroke 165 mm)
Main Generator	Nishishiba 300 KVA (240KW) x 450V x 60Hz x 3 sets
Main Air Compressor	Motor driven Natsubara MH-114A x 2 sets, 65 m ³ /h x 30 kg/cm ² 18.5 KW x 1200 rpm
Emergency Air Compressor	Hand wing x 1 set
Main Air Reservoir	Hemmi Iron Works 800 L x 30 kgf/cm ² x 2 sets
Auxiliary Air Reservoir	Yanmar 80L x 60 kg/cm ² x 1 set

WATER PUMPS

Pump	Type	Set	Capacity (m ³ /h x m)	Motor (KW)	Maker & Model
C.F.W Pump	Centrifugal	2	24 x 20	3.7 x 3600	Heishin HLY-35F
C.S.W Pump	Centrifugal	1	130 x 20	11.0 x 1800	Heishin RV-135E
Fire & G.S. Pump	Centrifugal	1	50/130 x 55/20	26.0 x 1800	Heishin RV-80J
Bilge & Ballast Pump	Centrifugal	1	50/130 x 55/20	26.0 x 1800	Heishin RV-80J
Bilge Pump	Plunger	1	1 x 25	0.75 x 1800	Heishin HPA-1
G/E C.S.W. Pump	Centrifugal	1	45 x 20	5.5 x 3600	Heishin HLY-55F
S.W Service Pump	Centrifugal	1	45 x 30	7.5 x 3600	Heishin HLY-55F
F.W. Service Pump	Centrifugal	1	4 x 40	2.2 x 3600	Heishin HLY-5L
Potable Water Pump	Centrifugal	1	4 x 40	2.2 x 3600	Heishin HLY-5L
Feed Water Pump	Centrifugal	2	3.8 x 110	5.5 x 3600	Heishin RY-21
Economizer Circ. Pump	Centrifugal	2	2.5 x 30	1.5 x 3600	Heishin CY-5GNA



OIL PUMPS

Pump	Type	Set	Capacity (m3/h x kg.cm2)	Motor (KW x rpm)	Maker & Model
Lub. Oil Pump	Screw	2	75 x 4.5	22 x 1800	Heishin MST-65T
M/E F.O. Booster Pump	Gear	2	0.6 x 4	0.75 x 1200	Heishin M-1B
M/E F.O. Circ. Pump	Gear	2	2.0 x 6	2.2 x 1200	Heishin MA-2BN
F.O. Transfer Pump	Gear	1	6 x 3	3.7 x 1200	Heishin M-6B
D.O. Transfer Pump	Gear	1	3 x 3	1.5 x 1200	Heishin M-3B
L.O. Transfer Pump	Gear	1	3 x 3	1.5 x 1200	Heishin M-3B
Sludge Pump	Snake	1	2 x 4	1.5 x 1200	Heishin HNP-301

Engine Room Ventilator	Motor driven axial flow fan, 450 m3/min x 30 mmAq x 2 sets 5.5 KW x 1200 rpm, Onishi Electric 3SM6-550
F.O. Purifier Room Ventilator	Motor driven axial flow fan, 500 m3/min x 30 mmAq x 1 set 0.75 KW x 3600 rpm, Onishi Electric 3SM2-075
Galley Exhaust Fan	Motor driven axial flow fan, 35 m3/min x 25 mmAq x 1 set 0.4 KW x 1700 rpm, Onishi Electric 3SM4-040
F.O Purifier	750 l/h x 2 sets, 3.7 KW x 3600 rpm, MMPX-304
L.O Purifier	900 l/h x 1 set, 3.7 KW x 3600 rpm, MMPX-304

HEAT EXCHANGER

Name	Type	Set	Capacity (m2)	Maker & model
M/E F.W. Cooler	Horizontal surface	1	12	Yamashina Seiki
M/E L.O. Cooler	Horizontal surface	1	70	Yamashina Seiki
Main Air Comp. F.W. Cooler	Horizontal surface	1	1	Stouchi Kogyo
Tank Cleaning Heater	Horizontal surface	1	11	Stouchi Kogyo
Drain Cooler	Horizontal surface	1	4	Stouchi Kogyo
F.O. Heater For Main Engine	Sunrod	1	XLV90-200	Sunrod, ABB GAdelius Marine
F.O. Heater For Purifier	Sunrod	1	XLV90-75	Sunrod, ABB GAdelius Marine
L.O. Heater For Purifier	Sunrod	1	XLV90-75	Sunrod, ABB GAdelius Marine
F.W Heater For M/E	Plate type	1		Harison
Calorifier	Steam/electric	1	2,000 L/h	Harison



MISCELLANEOUS MACHINERY

Name	Type	Set	Capacity	Maker & Model
Incinerator	for waste oil	1	150,000 kcal/h	MIURA BGW-20
Sewage Treatment	Biological type	1	20 persons	Taiko SBT-25
Control Air Dryer	Refrigerated type	1	20 m2/h	SMC IDF 3D-1-X130
Oily Water Separator	15 ppm	1	1 m3/h	Heishin HMS-100
F.W. Generator		1	5 ton/day	Alfa Laval JWP-16+C40
Marine Growth Preventing System	Electrode type	1	500 m3/h	CATHELCO

TANKS

	Tank	Qty	Capacity (m3)
Fuel & Diesel Oil	D.O. service tank	1	1.5
	D.O. settling tank	1	1.5
	F.O. service tank	1	3.0
	F.O. settling tank	1	3.0
	Waste oil settling tank	1	1.0
	F.O. sludge tank	1	0.2
	F.O. drain tank	1	0.1
Lub. Oil	L.O. settling tank	1	5.0
	L.O. sump tank	1	5.0
	L.O. storage tank	1	3.0
	Cylinder oil storage tank	1	6.0
	Cylinder oil service tank	1	0.1
	G/E L.O. storage tank	1	1.0
	Scavenging box drain tank	1	0.3
	Stuff. box L.O. drain tank	1	2.72
	Stuff. box L.O. sett. tank	1	
	L.O. sludge tank	1	0.2
	L.O. drain tank	1	0.1
Water	C.F.W expansion tank	1	0.8
	F.W. hydrophore tank	1	0.5
	Potable water hydrophore tank	1	0.5
	Feed water filter tank	1	1.0
	Observation tank	1	0.2
Miscellaneous	Wash oil tank	1	0.25
	Bilge tank	1	6.07
	Bilge oil tank	1	6.05



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PARTICULARS FOR ELECTRIC DEPARTMENT

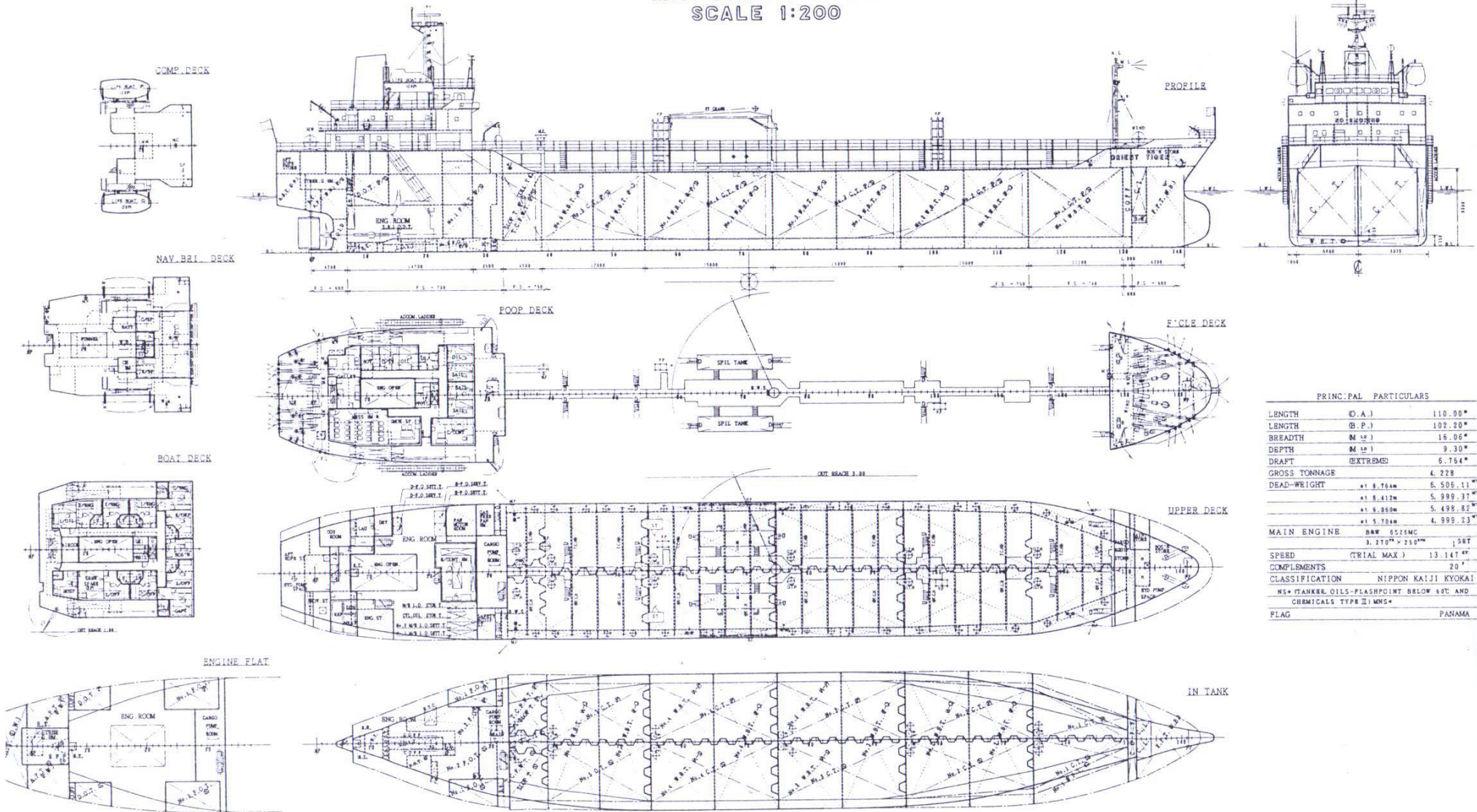
Main Generator	Nishishiba Electric, brushless self-ventilating type 240 KW x AC450V x 60 Hz x 1200RPM x3 sets
Transformer	Torishima Electric 20 KVA x AC450/105V Dry type self-cooling
Storage Battery For General Use	Furukawa SS300 300 AH x DC24V
Storage Battery For Radio Use	Furukawa SS200 200 AH x DC24V
Induction Motor (Small Size)	Nishishiba Electric, IP44 below 11KW x 6P, 18.5KW x 4P
Induction Motor (Large Size)	Nishishiba Electric, IP23 above 15KW x 6P, 22KW x 4P
Main Switchboard	Japan Radio & Elec., Dead front drip proof, Generator panel – 3 Feeder panel – 2
Battery Charge & Discharge Board	Japan Radio & Elec., Dead front drip proof
Shore Connection Box	Japan Radio & Elec., Dead front drip proof, 440V x 3P x 60Hz x 200A



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GENERAL ARRANGEMENT

M.V. ORIENT TIGER
 SCALE 1:200



PRINCIPAL PARTICULARS		
LENGTH (D.A.)		110.00*
LENGTH (B.P.)		102.20*
BREADTH (M ₁₂)		16.06*
DEPTH (M ₁₂)		9.30*
DRAFT (EXTREME)		6.764*
GROSS TONNAGE		4,228
DEAD-WEIGHT	at 6.764m	6,506.11**
	at 6.412m	5,999.31**
	at 6.850m	5,498.82**
	at 5.104m	4,999.23**
MAIN ENGINE	BAW 6524MC 3,270 ^{HP} × 250 ^{MM} 1,58T	
SPEED (TRIAL MAX.)	13.147 ^{KT}	
COMPLEMENTS	20 ¹	
CLASSIFICATION	NIPPON KAIJI KYOKAI	
* (TANKER OILS - FLASHPOINT BELOW 60°C AND CHEMICALS TYPE III) MNS*		
FLAG	PANAMA	