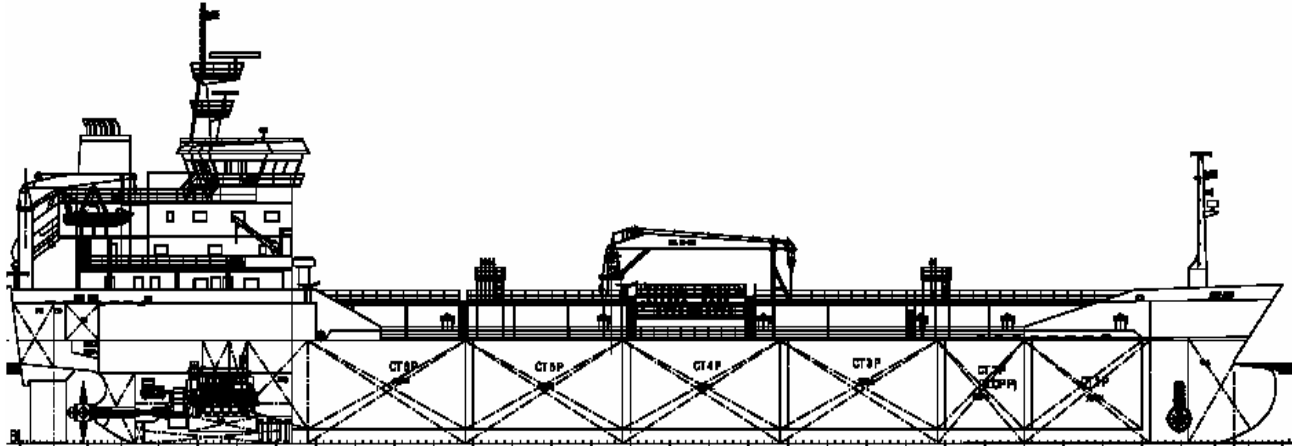


## 6,500DWT PRODUCT/CHEMICAL IMO II TANKER



### GENERAL DESCRIPTION

The vessel is a single screw motor driven product oil tanker with machinery and accommodation located aft, having forecastle and four tiers of deck house. Six (6) pairs of double side skin cargo tanks with epoxy coating served by individual are arranged. One pair of small cargo tank also to be served as slop tank. Six (6) grades of cargo segregation to be arranged. The ship is capable of carrying product oil with flash point <60°C, as well as veg. oil, palm oil as per IBC Ch.18, as well as IMO II chemicals, which can be lawfully carried according to Class Notation, technical construction and not harmful to cargo system.

### PRINCIPAL PARTICULARS

Loa abt.	118.80	m	Service speed	13.4	kn	d <sub>designed</sub>
Lpp	105.00	m	(85%MCR)			
B	17.40	m	Endurance	8,000	n.mile	
D	9.00	m	Complement	14+2	P	
d <sub>designed</sub>	6.50	m				
DWT	6,500	t				
Ds			F.O.C. (M/E)	abt. 10.95	t/d	+5%toler.
DWT			(F.O. 10,200	kcal/kg	under	ISO)

### CAPACITY

Cargo Hold (100%)		
Include slop tanks	8,000	m <sup>3</sup>
Liquid Tank		
F.O.T.	380	m <sup>3</sup>
F.W.T.	50	m <sup>3</sup>
W.B.T.	abt. 2,600	m <sup>3</sup>

### CLASS NOTATION

BV I ✕HULL, ✕MACH, Oil tanker/Chemical tanker (IMO II) ESP, Unrestricted navigation, ICE CLASS 1C, MON-SHAFT, INWATERSURVEY, CLEAN-SEA, AUT-UMS

FLAG: Panama

### MAIN ENGINE

Type	B&W 6L32040	1 set
MCR:	abt. 3000 kW	x 750 r/min
CSR :	abt. 2550 kW	x

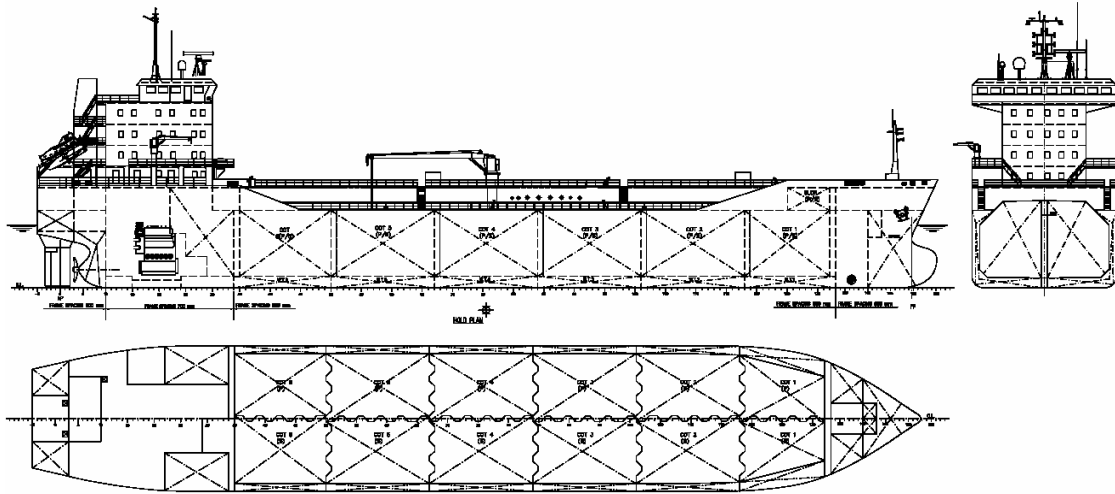
### GENERATOR

Main Generator	3 x 450 kW,	1800 r/min
Shaft Generator	abt.350kW	440V, 60Hz
Emer. Generator	1 x 180kW,	1800 r/min

### EQUIPMENT

Cargo Pump	12 sets x 350m <sup>3</sup> /h	X 80mLc	Hose Handling Crane	1 sets x 5t	x 16 m
	Electric; deepwell				
Boiler	2 x 2,400 kg/h	X 7bar			
Tank Cleaning	Sea water washing	/ Portable			

# 10,000DWT PRODUCT/CHEMICAL IMO II TANKER



## GENERAL DESCRIPTION

The vessel is a single screw motor driven product / chemical tanker with machinery and accommodation located aft, having forecastle and four tiers of deck house. Six (6) pairs of double side skin cargo tanks including one (1) pair of slop tanks with phenolic epoxy coating are arranged. Each cargo hold is provided with a hydraulic deepwell pump. Cargo system segregation allows five (6) grades of cargo to be loaded. All cargo piping is of stainless steel. The ship is capable of carrying product oil with flash point <math>60^{\circ}\text{C}</math>, palm oil, benzene, toluene, xylene and other IMO II & III chemicals. Specific gravity is up to 1.55 t/m<sup>3</sup>.

## PRINCIPAL PARTICULARS

Loa abt.	122.50 m	Service speed	abt. 13.8 kn	$d_{\text{designed}}$
Lpp	116.00 m	(CSR)		
B	19.20 m	Endurance	7,000	n.mile
D	10.20 m	Complement	16+2	P
$d_{\text{designed}}$	8.20 m			
DWT	10,000 t	F.O.C.	abt. 15.6 t/d	+5%toler.
		(F.O. 10,200	kcal/kg under	ISO)

## CAPACITY

Cargo Hold	
Include slop tanks	12,000 m <sup>3</sup>
Liquid Tank	
F.O.T.	500 m <sup>3</sup>
F.W.T.	140 m <sup>3</sup>
W.B.T.	abt. 3,700 m <sup>3</sup>

## CLASS NOTATION

BV    ⚡HULL, ⚡MACH, Oil tanker/Chemical tanker (IMO II) ESP, Unrestricted navigation, ICE CLASS 1C, MON-SHAFT, INWATERSURVEY, CLEAN-SEA, AUT-UMS

**FLAG:** Liberia

## MAIN ENGINE

Type	MAN B&W 8L32/40	1 set
MCR:	abt. 4000 kW	x 750 r/min
CSR :	abt. 3900 kW	

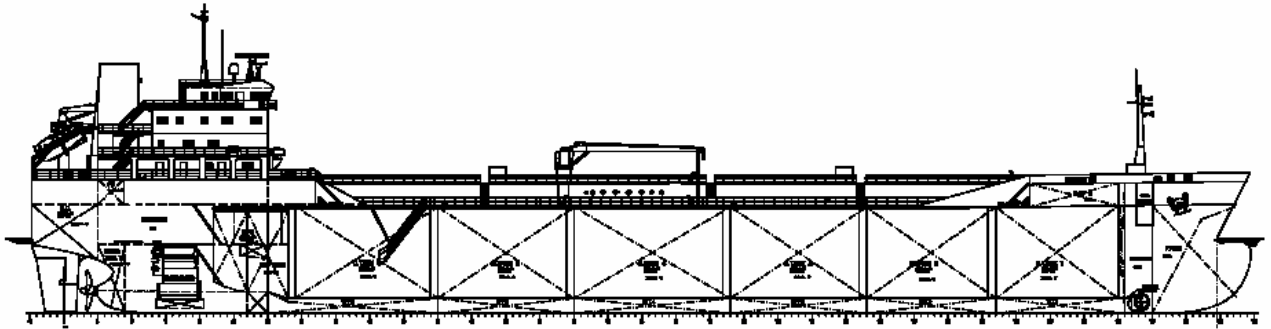
## GENERATOR

Shaft Generator	1 x 750 kW,	1800 r/min
Main Generator	3 x 500 kW,	1800 r/min
Emer. Generator	1 x 95 kW,	1800 r/min

## EQUIPMENT

Cargo Pump	12 sets x 200m <sup>3</sup> /h x 100mLc	Hose Handling Crane	1 set x 5.0t x 12.5m
	2 sets x 100m <sup>3</sup> /h x 100mLc	Bow Thruster	1 set x 450 kW
Boiler	1 x 1800kW		

## 16,500DWT PRODUCT/CHEMICAL TANKER



### GENERAL DESCRIPTION

The vessel is a single screw motor driven product / chemical tanker with machinery and accommodation located aft, having forecastle and four tiers of deck house. Six (6) pairs of double side skin cargo tanks and one (1) pair of slop tanks with phenolic epoxy coating are arranged. Cargo system segregation allows four (4) grades of cargo to be loaded. All cargo piping is of stainless steel. The ship is capable of carrying product oil with flash point <60°C, palm oil, benzene, toluene, xylene and other IMO III chemicals which can be lawfully carried according to Class Notation, technical construction and not harmful to cargo system. Design specific gravity for cargo tanks is 1.025t/m<sup>3</sup>, but it allows partially load with specific gravity up to 1.54 t/m<sup>3</sup>.

### PRINCIPAL PARTICULARS

Loa abt.	144.00 m	Service speed	> 13.0 kn	d <sub>designed</sub>
Lpp	135.60 m	(CSR+15%SM)		
B	23.00 m	Endurance	9,000	n.mile
D	12.50 m	Complement	23	P
d <sub>designed</sub>	8.80 m	G. tonnage	abt. 11,500	
DWT	16,500 t			
Ds	8.80 m	F.O.C.	abt. 16.94 t/d	+5%toler.
DWT	16,500 t	(F.O. 10,200	kcal/kg under	ISO)

### CAPACITY

Cargo Hold	
Include slop tanks	>19,000 m <sup>3</sup>
Liquid Tank	
F.O.T.	650 m <sup>3</sup>
F.W.T.	250 m <sup>3</sup>
W.B.T.	abt. 7,000 m <sup>3</sup>

### CLASS NOTATION

Bureau Veritas (BV) I HULL MACH, Oil/Chemical Tanker ESP, VeriStar, Unrestricted Navigation, AUT-UMS

FLAG: Panama

### MAIN ENGINE

Type	B&W 6S35MC	1 set
MCR:	abt. 4440 kW	x 173 r/min
CSR :	abt. 3996 Kw	x 167 r/min

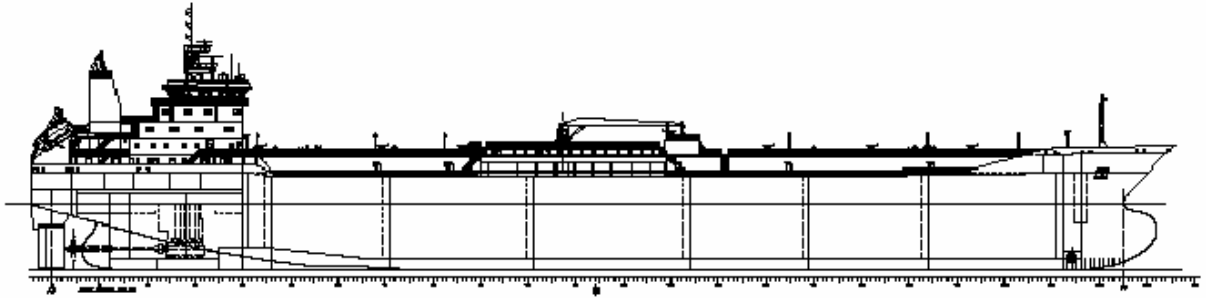
### GENERATOR

Main Generator	3 x 400 kW,	900 r/min
	450V,	60 Hz
Emer. Generator	1 x 95 kW,	1800 r/min
	450V,	60 Hz

### EQUIPMENT

Cargo Pump	4 sets x 500m <sup>3</sup> /h	x 100mLc	Hose Handling Crane	1 set x 5.0t	x 14.5m
	Electric; Twin screw;	Two speeds	Bow Thruster	1 set x 500	kW
Boiler	2 x 7,000kg/h	x 7bar			
Tank Cleaning	Sea water washing				

## 35,000/40,000DWT PRODUCT OIL TANKER



### GENERAL DESCRIPTION

The vessel is a single screw motor driven product oil tanker with machinery and accommodation located aft, having forecastle and five tiers of deck house. Six (6) pairs of double side skin cargo tanks and one (1) pair of slop tanks with phenolic epoxy coating are arranged. Cargo system segregation allows six (6) grades of cargo to be loaded. All cargo piping is of stainless steel. The ship is capable of carrying crude oil, product oil, MTBE, vegetable oil, etc. which can be lawfully carried according to Class Notation, technical construction and not harmful to cargo system. Design specific gravity for cargo tanks is 1.025t/m<sup>3</sup>, but it allows partially load with specific gravity up to 1.54 t/m<sup>3</sup>.

### PRINCIPAL PARTICULARS

Loa abt.	180.00 m	Service speed	15.0 kn	d <sub>designed</sub>
Lpp	170.00 m	(8500kW+ 500Kw	S.G. + 15%SM)	
B	31.00 m	Endurance	13,000	n.mile
D	16.20 m	Complement	23	P
d <sub>designed</sub>	10.00 m	G. tonnage	abt. 11,500	
DWT	35,000 t			
Ds	11.20 m	F.O.C.	abt. 36.7 t/d	+5%toler.
DWT	40,000 t	(F.O. 10,200	kcal/kg under	ISO)

### CAPACITY

Cargo Hold	45,000 m <sup>3</sup>
Slop Tanks	1,300 m <sup>3</sup>
Liquid Tank	
F.O.T.	1,600 m <sup>3</sup>
D.O.T.	200 m <sup>3</sup>
F.W.T.	200 m <sup>3</sup>
W.B.T.	17,000 m <sup>3</sup>

### CLASS NOTATION

LR ✕100A1 Double Hull Oil Tanker; ✕LMC, UMS, ShipRight, FDA,SDA, CM, ESP, IWS, IGS, SPM  
with the descriptive Notations COW, SBT/PL, PT, HT

**FLAG:** Panama

### MAIN ENGINE

Type	MAN B&W 6S50MC-C	1 set
MCR:	9480 kW x	127 r/min
CSR :	8532 kW x	123 r/min

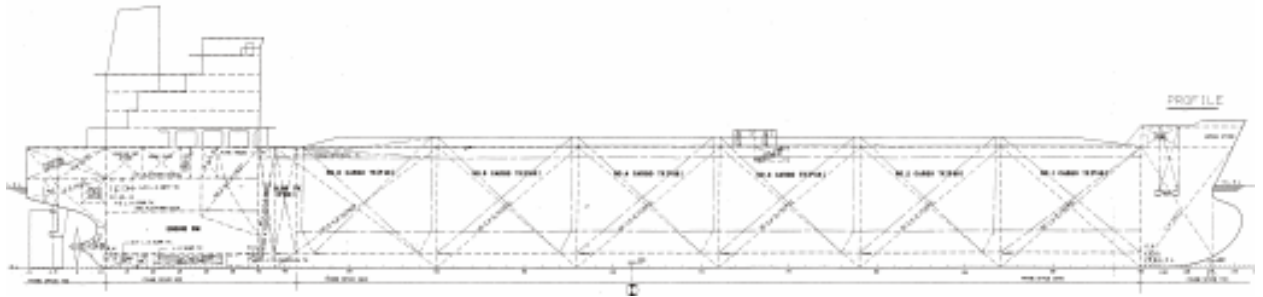
### GENERATOR

Shaft Generator	1 x 2200 kW,	1800 r/min
Main Generator	2 x 1200 kW,	1800 r/min
	1x 600 kW,	1800 r/min
Emer. Generator	1x 300 kW,	1800 r/min

### EQUIPMENT

Cargo Pump	12 sets x 500m <sup>3</sup> /h	x 110mLc	Hose Handling Crane	1 set x 10t	x 20m
Discharge rate	4,000 m <sup>3</sup> /h		Bow Thruster	1 set x 500 kW	
Boiler	1 x 20,000kg/h	x 7bar			
Tank Cleaning	Crude oil/Sea water				

## 46,000DWT PRODUCT OIL TANKER



### GENERAL DESCRIPTION

The vessel is a single screw motor driven product oil tanker with machinery and accommodation located aft, having forecastle and six tiers of deck house. Six (6) pairs of double side skin cargo tanks and one (1) pair of slop tanks with pure epoxy coating are arranged. Cargo system segregation allows three (3) grades of cargo to be loaded. All cargo piping is of pure epoxy coated. The ship is capable of carrying cargo oil which can be lawfully carried according to Class Notation, technical construction and not harmful to cargo system. Design specific gravity for cargo tanks is 1.025t/m<sup>3</sup>.

### PRINCIPAL PARTICULARS

Loa abt.	183.00 m	Service speed	14.5 kn	$d_{\text{designed}}$
Lpp	175.00 M	(CSR + 15% SM)		
B	32.26 m	Endurance	15,000	n.mile
D	18.60 m	Complement	28	P
$d_{\text{designed}}$	12.10 m	G. tonnage	abt. 29,000	
DWT	46,000 t			
Ds	12.10 m	F.O.C.	abt. 34.5 t/d	+5%toler.
DWT	46,000 t	(F.O. 10,200	kcal/kg under	ISO)

### CAPACITY

Cargo Hold	55,000 m <sup>3</sup>
(100% incl slop tanks)	
Liquid Tank	
F.O.T.	1,700 m <sup>3</sup>
D.O.T.	150 m <sup>3</sup>
F.W.T.	250 m <sup>3</sup>
W.B.T.	22,000 m <sup>3</sup>

### CLASS NOTATION

ABS ✕A1(E), Oil Tanker, ESP, S.H., ✕AMS, ✕ACCU.  
or LR equivalent

**FLAG:** Panama

### MAIN ENGINE

Type	MAN B&W 5L60MC	1 set
MCR:	8,500 kW x	123 r/min
CSR :	7,650 kW x	119 r/min

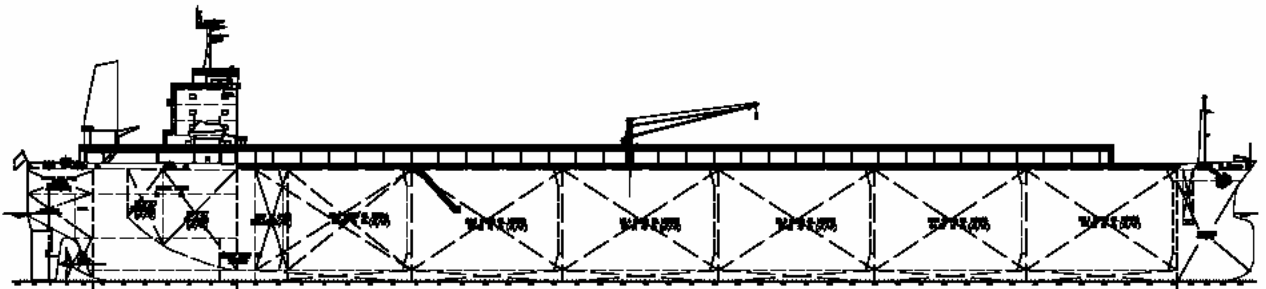
### GENERATOR

Main Generator	3 x 950 kW,	900 r/min
	450V.	60 Hz
Emer. Generator	1x 130 kW,	1800 r/min
	450V.	60 Hz

### EQUIPMENT

Cargo Pump	12 sets x 500m <sup>3</sup> /h	x 110mLc	Hose Handling Crane	1 set x 10t	x 24 m
Discharge rate	max. 4,000 m <sup>3</sup> /h				
Boiler	1 x 18,000kg/h				x 7bar
Tank Cleaning	Crude oil/Sea water				

## 73,000DWT PANAMAX PRODUCT OIL TANKER



### GENERAL DESCRIPTION

The vessel is a single screw motor driven product oil tanker with machinery and accommodation located aft, having forecastle and six tiers of deck house. Six (6) pairs of double side skin cargo tanks and one (1) pair of slop tanks with pure epoxy coating are arranged. Cargo system segregation allows three (3) grades of cargo to be loaded. All cargo piping is of pure epoxy coated. The ship is capable of carrying cargo oil which can be lawfully carried according to Class Notation, technical construction and not harmful to cargo system. Design specific gravity for cargo tanks is 1.025t/m<sup>3</sup>.

### PRINCIPAL PARTICULARS

Loa abt.	226.50 m	Service speed	15.0 kn	d <sub>designed</sub>
Lpp	217.00 M	(CSR + 10% SM)		
B	32.26 m	Endurance	20,000	n.mile
D	20.30 m	Complement	24 + 6	P
d <sub>designed</sub>	12.50 m	G. tonnage	abt. 40,000	
DWT	60,700 t			
Ds	14.25 m	F.O.C.	abt. 37.5 t/d	+5%toler.
DWT	73,000 t	(F.O. 10,200	kcal/kg under	ISO)

### CAPACITY

Cargo Hold	77,500 m <sup>3</sup>
(100% incl slop tanks)	
Liquid Tank	
F.O.T.	2,800 m <sup>3</sup>
D.O.T.	150 m <sup>3</sup>
F.W.T.	250 m <sup>3</sup>
W.B.T.	28,000 m <sup>3</sup>

### CLASS NOTATION

ABS ✕A1(E), Oil Tanker, ESP, S.H., ✕AMS, ✕ACCU.  
or LR equivalent

**FLAG:** Panama

### MAIN ENGINE

Type	MAN B&W 5S60MC-C	1 set
MCR:	10200 kW x	105 r/min
CSR :	9180 kW x	101 r/min

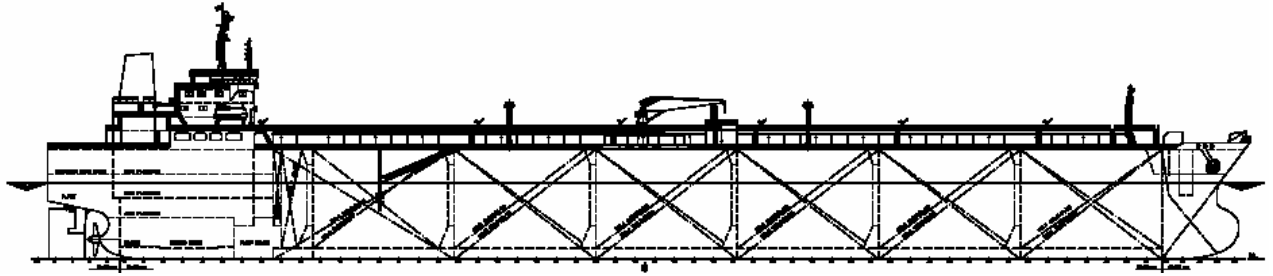
### GENERATOR

Main Generator	3 x 650 kW,	900 r/min
	450V.	60 Hz
Emer. Generator	1x 150 kW,	1800 r/min
	450V.	60 Hz

### EQUIPMENT

Cargo Pump	3 sets x 2000m <sup>3</sup> /h	x 130mLc	Hose Handling Crane	1 set x 15t	x 3 m outreach
Discharge rate	max. 6,000 m <sup>3</sup> /h				
Boiler	2 x 23,000kg/h				
	x 7bar				
Tank Cleaning	Crude oil/Sea water				

## 110,000DWT AFRAMAX PRODUCT OIL TANKER



### GENERAL DESCRIPTION

The vessel is a single screw motor driven product oil tanker with machinery and accommodation located aft, having forecastle and five tiers of deck house. Six (6) pairs of double side skin cargo tanks and one (1) pair of slop tanks with pure epoxy coating are arranged. Cargo system segregation allows three (3) grades of cargo to be loaded. All cargo piping is of pure epoxy coated. The ship is capable of carrying cargo oil which can be lawfully carried according to Class Notation, technical construction and not harmful to cargo system. Design specific gravity for cargo tanks is 1.025t/m<sup>3</sup>.

### PRINCIPAL PARTICULARS

Loa abt.	244.50 m	Service speed	15.0 kn	$d_{\text{designed}}$
Lpp	233.00 M	(at 12800kW)		
B	42.00 m	Endurance	18,000	n.mile
D	22.20 m	Complement	28	P
$d_{\text{designed}}$	14.90 m	G. tonnage	abt. 18,000	
DWT	105,000 t			
Ds	15.45 m	F.O.C.	abt. 51.6 t/d	+5%toler.
DWT	110,000 t	(F.O. 10,200	kcal/kg under	ISO)

### CAPACITY

Cargo Hold	122,000 m <sup>3</sup>
(98% incl. slop tanks)	
Liquid Tank	
F.O.T.	3,400 m <sup>3</sup>
D.O.T.	250 m <sup>3</sup>
F.W.T.	250 m <sup>3</sup>
W.B.T.	39,000 m <sup>3</sup>

### CLASS NOTATION

LR ✕100A1 Double Hull Oil Tanker, Ice Class 1A, ✕LMC, UMS, ShipRight, FDA,SDA, CM, ESP, IWS, IGS, SPM with the descriptive Notations COW, SBT/PL, PT, HT

**FLAG:** Panama

### MAIN ENGINE

Type	MAN B&W 7S70MC-C	1 set
MCR:	21770 kW x	91 r/min
CSR :	18505 kW x	86 r/min

### GENERATOR

Main Generator	3 x 870 kW,	720 r/min
	450V.	60 Hz
Emer. Generator	1x 180 kW,	1800 r/min
	450V.	60 Hz

### EQUIPMENT

Cargo Pump	3 sets x 3000m <sup>3</sup> /h	x 130mLc	Hose Handling Crane	2 setsx 15t	x 16m
Discharge rate	max. 9,000	m <sup>3</sup> /h			
Boiler	2 x 35,000kg/h	x 7bar			
Tank Cleaning	Crude oil/Sea water				