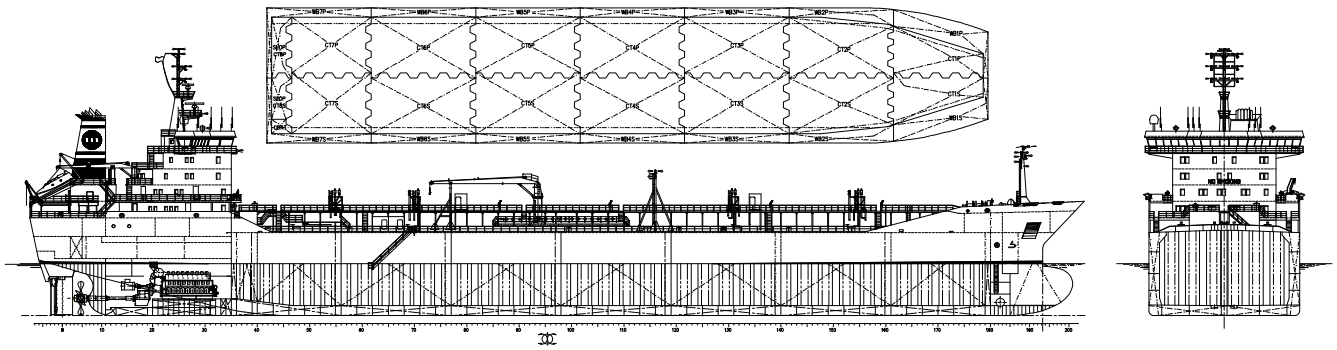
FACTORIAS VULCANO, S.A.

CHEMICAL & OIL TANKER VESSEL- FILING CARD

Name: VULCANO M	Owner / Broker: MEDNAV INTERNATIONAL S.L.	Nº IMO: 9251743	
		Build. no. 478	Stud. no.
Cargo Capacity: 25000 M3.	Country/ Flag: SPAIN	Filing Card	Date: 13,04,04 Rev.: 10
REFERENCE CBTO478 TQM	Type: CHEMICAL / OIL TANKER IMO 2	Built date:	Page: 1



Survey: L.R. Classed: +100 A1 Chemical & oil Tanquer, NAV 1, +LMC, UMS Ice: 1B

MAIN PARTICULARS (m)		TONNAGES (Tons)		CAPACITIES (m3)		OUTPUT / SPEED / RANGE	
Length Overall	161,12	GT (IMO 69)	13740	Cargo Tanks	24618	Output (KW)	8100
Length B. Perp.	149,80	NT (IMO 69)	6479	Slop Tanks	557	% MCR - % Sea	100/ 0
Breadth mould.	23,00	DWT (d. Sum.)	21300	Heavy Fuel	663	Speed trial (KN) // Draft	15,66 / 9,50
Depth mould.	13,40	DWT (d. Sct.)	21300	Diesel Oil	115	% MCR - % Sea	85/15/400 KW.
Summer draught	9,50	Displacement (9,5)	27918	Lub Oil	52	Speed serv. (KN) // Draft	
Scantling draught	9,50	Lightweight	6618	Fresh Water	478	Range (nm)	7000
Crew- Passage	19	TPC/I	32,5	Ballast Water	9781	Consumption t/day (F/D)	30 F.O. (85%)

CARGO TANK CAPACITIES (98%)						SEGREGATIONS		CARGO HANDLING			
	Units	IMO	Cap.m3	Pres.bar	Gra.T/m3	No. segregations	7+1 (slop)	Pumps	Hydraulic:		Electric: X
Total (+ Slop)	16	2	25175	0,2	1,54	Cap.m3 Epoxy	25175	Total	16	--	--
In Centre				-		Cap.m3 Zinc		D. Weel	14	300 m3/h	11 bar
In Wing	16			-		Cap.m3 Poly		Slop	2	80 m3/h	11 bar
On Deck	-	-	-	-	-	Cap.m3 S/Steel		Ballast	2	500 m3/h	3 bar
SAFETY AND OTHER DETAILS						CARGO LIST		Drain	1	75 m3/h	8 bar
	Units		m3/h		Pres.bar	1.- IMO 2 & 3		Heating system / Temperature ºC			THERM. OIL / 80
Foam generators						2.- 0		Center hose handling crane			10 t - 17 m.
Tank washing	33			at	12	3.- 0		Aft hose handling crane			2 t - 6,5 m.
						4.- 0		Privision Crane			3.5 t - 12 m.

MACHINERY AND AUX. ENGINES			SPECIAL EQUIPMENT		ANOTHER EQUIPMENT	
Engine (Desing / Type)	MAK	9M43				
Output (KW) / r.p.m.	8100	500	Integrate Nav. Bridge		Iner Gas System	X
			Bridge Control System	X	Steam Generator	X
Gear Box (Desing / Type)	RENK	HSUL-1200	Joystick		Manifold center	X
Reduction / Par	4,12:1		Radar Type Ullage	X	Manifold aft	X
Propeller (Desing / Type)	KAMEWA	132 X F5/4	Central. Cargo Operation	X	PTO / PTI	X
Blades Ø / r.p.m.	5400	121	Heavy Cargoes			
Bowthruster dia. // Kw	1650	800	Hazardous Cargoes	X		
Aux.Dies.Eng.(Desing.-KW./Typ)	(3) YANMAR 970	6N21 AL-EV	Bowthruster	X		
Alternator (Desing.-KW/rpm)	(3) AVK 900	900	Antiheeling System			
Aux.Dies.Eng.(Desing.-KW./Typ)						
Alternator (Desing.-KW/rpm)			DOCUMENTACION			
Shaft Alter. (Desing.-KW/rpm)	(1) AVK 1350	1800				
Harbour/Emer.(Desing.-KW./Typ)	(1) CATERPILLAR - 410	CAT 3408	Especificación	(Re/ Co -In/ Es)		C-I/E
Alternator (Desing.-KW/rpm)	(1) LEROY SOMMER - 370	1800	Planos	(Dis/For/Mae/Hi)		D/F/M/H
Exhaust Boiler (Desing/KW	(1) INTEC ETA 900-40	900	Cálculos	(Cap/Est/Pot/Bal)		C/E/P/B
Thermal oil heater (Desing/KW)	(2) INTEC ET3800/40-V	3800				