GENERAL ARRANGEMENT AND CAPACITY PLAN

M.V. KS FLORA

SCALE 1:200

PLAN HISTORY

LOADING

HOLD GAMMA (mt/m³)

	(RULE MIN.)	NO.2,4 HOLD EMPTY	BALLAST LOADING
NO.1 CARGO HOLD	* 1.0	** 1.40	–
NO.2 CARGO HOLD	* 1.0	–	–
NO.3 CARGO HOLD	* 1.0	** 1.40	–
NO.4 CARGO HOLD	* 1.0	–	–
NO.5 CARGO HOLD	* 1.0	** 1.40	–

$$\text{GAMMA} = \frac{\text{CARGO WEIGHT (mt)}}{\text{HOLD CAPACITY } (m^3) \text{ EXCLUDING HATCHWAY EXCEPT SPECIALLY MENTIONED}}$$

* INCLUDING HATCHWAY
** EXCLUDING HATCHWAY

UNIFORM LOAD (INNER BTM.)	(mt/m²)	(kN/m²)	HOT COIL LOAD	AXLE LOAD (ONLY IN PORT)
NO.1 CARGO HOLD	20.0	196.20	15 mt X 2 TIERS	45 T / 4 WHEELS
NO.2 CARGO HOLD	20.0	196.20		
NO.3 CARGO HOLD	20.0	196.20		
NO.4 CARGO HOLD	20.0	196.20		
NO.5 CARGO HOLD	20.0	196.20		

HOLD CAPACITY TABLE

COMPARTMENT	FRAME NO.	CAPACITY CUB.M.	CAPACITY CUB.FT.	CENTER OF GRAVITY LCG (m)	CENTER OF GRAVITY VCG (m)
– : GRAIN :–					
NO.1 CARGO HOLD	162–195	7,553.9	266,766	–62.27	8.42
NO.2 CARGO HOLD	129–162	9,640.7	340,461	–35.74	8.53
NO.3 CARGO HOLD	96–129	9,670.4	341,510	–7.73	8.53
NO.4 CARGO HOLD	63– 96	9,670.4	341,510	20.32	8.53
NO.5 CARGO HOLD	30– 63	9,091.0	321,049	48.00	8.92
TOTAL		45,626.4	1,611,296	–	
Hatch coaming capacity is included in above.					
– : BALE :–					
NO.1 CARGO HOLD	162–195	7,333.0	258,965	–62.47	8.36
NO.2 CARGO HOLD	129–162	9,329.3	329,464	–35.74	8.50
NO.3 CARGO HOLD	96–129	9,337.0	329,736	–7.70	8.50
NO.4 CARGO HOLD	63– 96	9,337.0	329,736	20.35	8.50
NO.5 CARGO HOLD	30– 63	8,863.0	312,997	48.19	8.88
TOTAL		44,199.3	1,560,898	–	
Hatch coaming capacity is included in above.					
– : HATCH COAMING :–					
NO.1 HATCH COAM.	168–187	299.7	10,584	–62.43	15.59
NO.2 HATCH COAM.	135–158	489.4	17,283	–36.08	15.57
NO.3 HATCH COAM.	102–125	489.4	17,283	–8.02	15.57
NO.4 HATCH COAM.	69– 92	489.4	17,283	20.02	15.57
NO.5 HATCH COAM.	36– 59	489.4	17,283	48.07	15.57
TOTAL		2,257.3	79,716	–	

NOTE : 1. 1 CUB. M. = 35.315 CUB. FT.
2. (–) Signs in LCG indicates forward midship.

TANK CAPACITY TABLE (HULL PART)

COMPARTMENT		LOCATION (FR.NO.)	CAPACITY (m³) 100%FULL	WEIGHT (mt)	LCG	TCG	VCG	MAX. INERTIA (m⁴)
WATER BALLAST TANK			S.G.=1.025					
FORE PEAK TK.		195 – F.E.	1,295.7	1,328	–80.89	0.00	8.02	2,024
NO.1 BTM.W.B.TK.	P	162 – 195	534.8	548	–61.47	–5.78	0.93	4,740
	S	162 – 195	534.8	548	–61.47	5.78	0.93	4,740
NO.2 BTM.W.B.TK.	P	129 – 162	715.9	734	–35.24	–7.33	0.90	7,813
	S	129 – 162	716.4	734	–35.24	7.33	0.90	7,825
NO.3 BTM.W.B.TK.	P	96 – 129	527.6	541	–7.22	–9.28	0.90	3,204
	S	96 – 129	528.1	541	–7.21	9.28	0.90	3,207
NO.4 BTM.W.B.TK.	P	63 – 96	484.7	497	21.73	–9.50	0.91	2,884
	S	63 – 96	484.7	497	21.73	9.50	0.91	2,884
NO.5 BTM.W.B.TK.	P	29 – 63	348.9	358	46.86	–6.88	0.95	2,213
	S	29 – 63	348.9	358	46.86	6.88	0.95	2,213
NO.1 SIDE W.B.TK.	P	162 – 195	1,073.2	1,100	–63.38	–11.46	9.38	730
	S	162 – 195	1,073.2	1,100	–63.38	11.46	9.38	730
NO.2 SIDE W.B.TK.	P	129 – 162	830.5	851	–35.29	–13.62	9.16	304
	S	129 – 162	830.5	851	–35.29	13.62	9.16	304
NO.3 SIDE W.B.TK.	P	96 – 129	826.6	847	–7.18	–13.63	9.14	292
	S	96 – 129	826.6	847	–7.18	13.63	9.14	292
NO.4 SIDE W.B.TK.	P	63 – 96	825.6	846	20.86	–13.63	9.14	292
	S	63 – 96	825.6	846	20.86	13.63	9.14	292
NO.5 SIDE W.B.TK.	P	30 – 63	672.5	689	49.33	–12.80	7.56	454
	S	30 – 63	672.5	689	49.33	12.80	7.56	454
AFT. PEAK TK.		A.E.– 9	424.9	436	83.51	0.07	9.77	4,758
WATER BALLAST TOTAL			15,402.2	15,786	–			
FRESH WATER TANK			S.G.=1.000					
FRESH WATER TK.	P	A.E.– 9	154.7	155	83.68	–7.33	13.17	149
DRINK WATER TK.	S	A.E.– 9	154.7	155	83.68	7.33	13.17	149
FRESH WATER TOTAL			309.4	310	–			

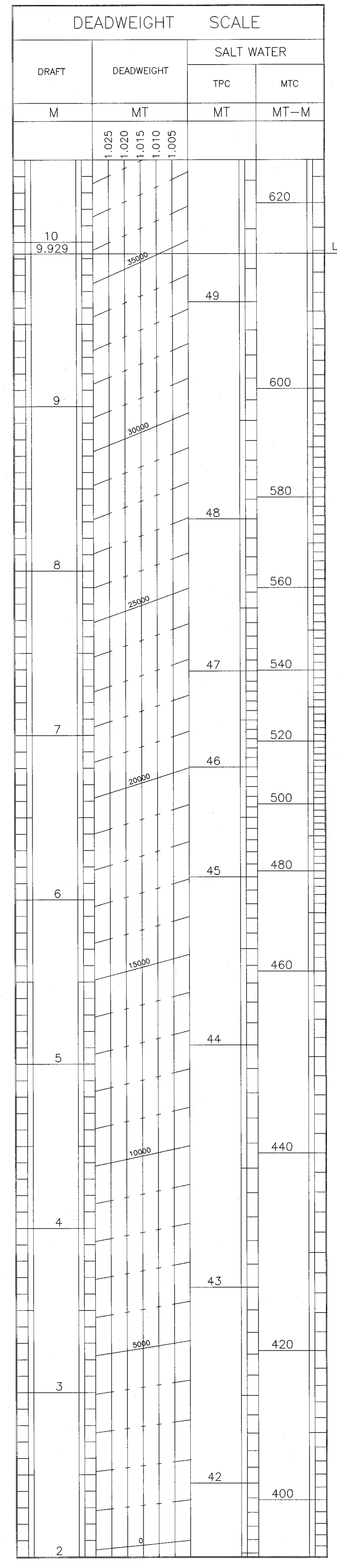
Note : 1. (–) Signs in LCG indicate forward midship.
2. (–) Signs in TCG indicate port side.

TANK CAPACITY TABLE (MACHINERY PART)

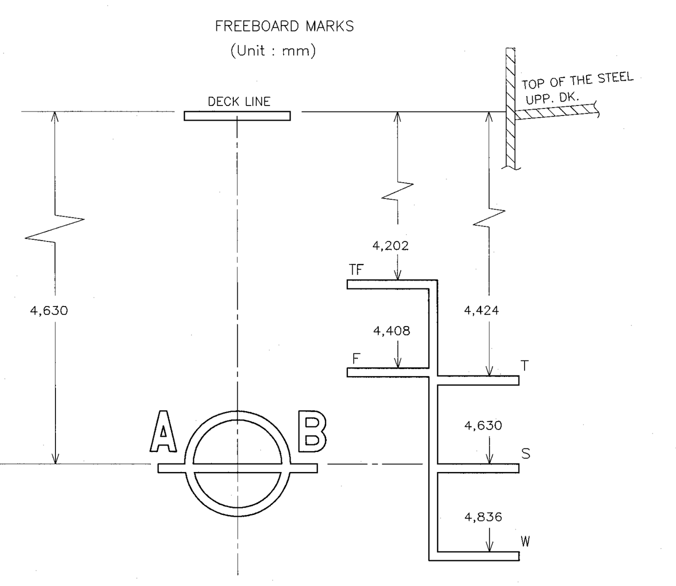
COMPARTMENT		LOCATION (FR.NO.)	CAPACITY (m³) 100% FULL	WEIGHT (mt) 96% FULL	LCG	TCG	VCG	MAX. INERTIA (m⁴)
FUEL OIL TANK			S.G.= 0.935					
NO.1 FUEL OIL TK.	C	96 –129	376.3	338	–7.19	0.00	0.89	1,067
NO.2 FUEL OIL TK.	P	63 – 96	229.0	206	18.79	–2.68	0.89	522
	S	63 – 96	229.5	206	18.82	2.68	0.89	522
NO.3 FUEL OIL TK.	C	29 – 63	277.7	249	46.30	0.00	0.89	614
NO.4 FUEL OIL TK.	P	30 – 63	183.9	165	49.02	–12.09	13.64	110
	S	30 – 63	183.9	165	49.02	12.09	13.64	110
H.F.O. SETT. TK.	S	26+400–29	* 12.5	* 12	64.75	11.07	10.00	7
No.1 H.F.O. SERV. TK.	S	24 –26+400	* 12.9	* 12	66.73	11.03	10.08	7
No.2 H.F.O. SERV. TK.	S	20 – 24	* 16.1	* 15	69.25	10.73	10.10	6
FUEL OIL TOTAL			1,521.8	1,368	–			
DIESEL OIL TANK			S.G.= 0.900					
No.1 DIESEL OIL TK.	P	25 – 30	27.3	24	64.30	–11.30	13.25	14
No.2 DIESEL OIL TK.	P	13 – 25	79.8	69	71.17	–10.91	13.03	16
D.O. SERV. TK.	P	25–27+400	* 16.7	15	65.95	–11.32	12.59	7
DIESEL OIL TOTAL			123.8	108	–			
LUB. OIL TANK			S.G.= 0.900					
M/E L.O. SUMP TK.	C	16 – 26	14.2	13	70.63	0.00	0.97	7
M/E L.O. SETT. TK.	S	23 – 26	* 14.8	* 13	67.32	11.26	13.01	8
M/E L.O. STOR. TK.	S	26 – 29	* 15.3	* 14	64.95	11.39	12.98	10
G/E L.O. SETT. TK.	S	20 – 23	* 5.1	* 5	69.78	10.19	12.99	1
G/E L.O. STOR. TK.	S	20 – 23	* 6.5	* 6	69.70	11.60	12.95	1
NO.1 CYL. OIL TK.	P	10 – 13	* 9.3	* 8	77.72	–7.21	12.49	1
NO.2 CYL. OIL TK.	P	10 – 13	* 16.0	* 14	77.67	–9.39	12.51	5
MISCELLANEOUS TANK								
CLEAN DRAIN TK.	S	27 – 29	8.4		64.51	3.31	1.07	9
SLUDGE TK.	S	24 – 28	6.1		66.15	7.20	7.55	4
F.O. CLEAN DR. COMPT.	S	24 – 26	4.1		66.94	2.66	1.00	1
F.O. OVERFLOW TK.	S	18 – 27	16.6		68.63	3.00	1.18	12
BILGE SEP. OIL TK.	P	18 – 27	20.7		68.29	–2.93	1.14	14
GRAY WATER TK.	P	13 – 30	107.8		69.67	–12.65	12.31	95
BILGE TK.	C	9 – 14	16.6		77.26	–0.07	0.94	12
COOL. W. TK.		AE – 9	22.4		80.60	0.00	4.61	61

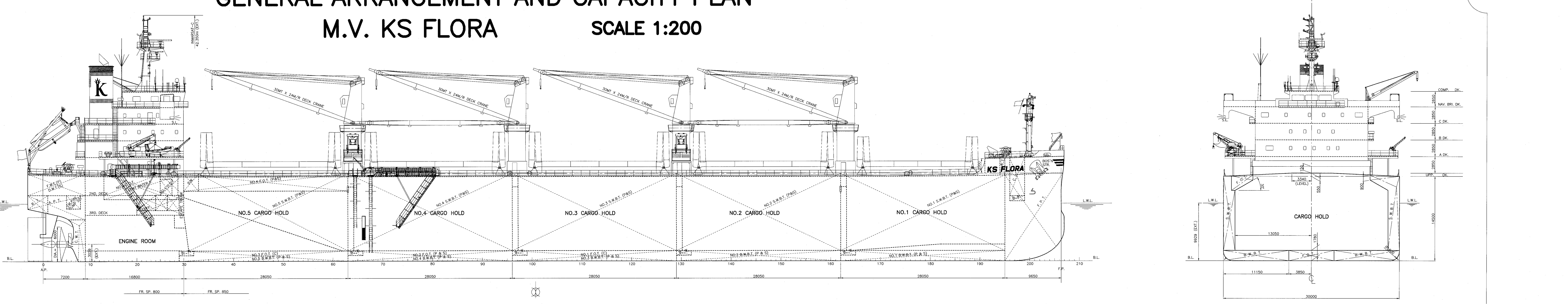
Note : 1. (–) Signs in LCG indicate forward midship.
2. (–) Signs in TCG indicate port side.
3. (*) Marks in capacity mean full of overflow position.
4. Weight of F.O. and D.O. are corresponding to 96% full capacity.

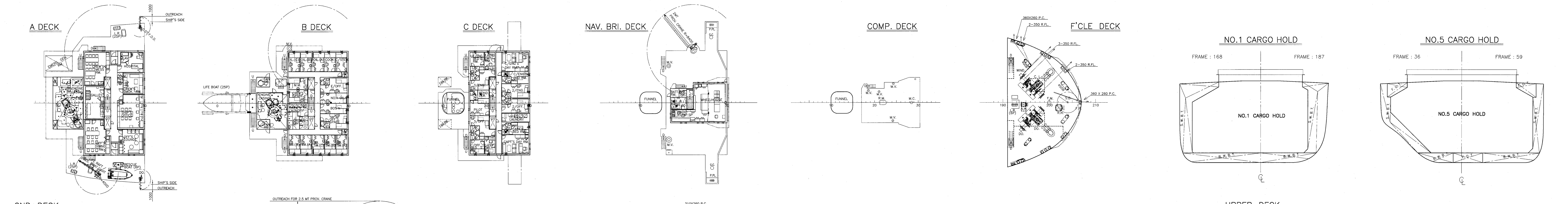
DEADWEIGHT SCALE

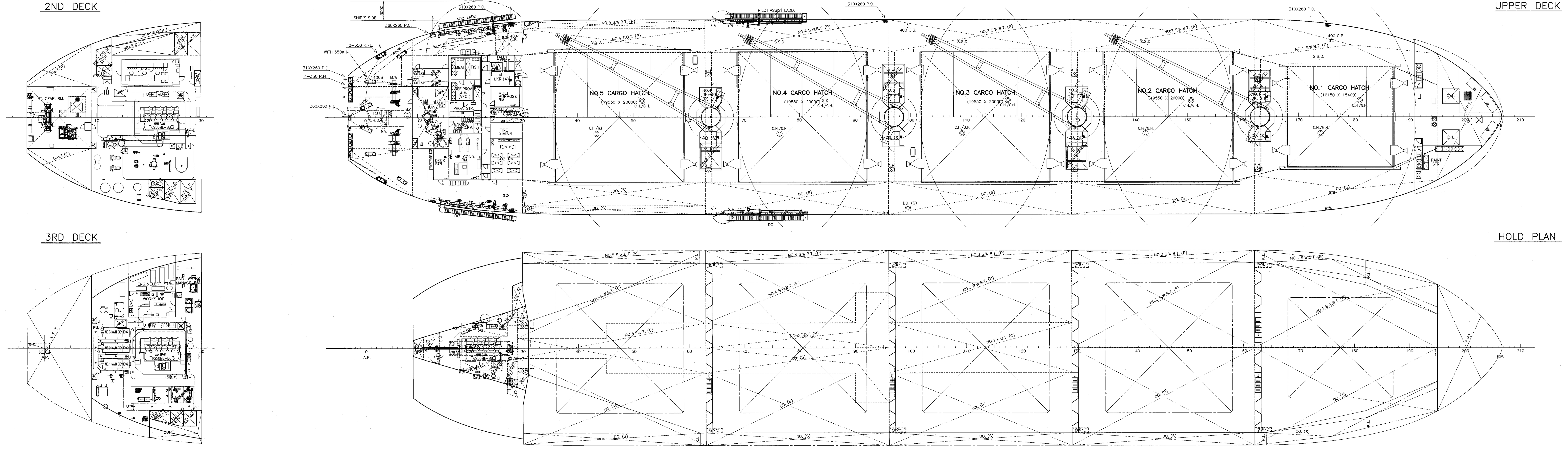


FREEBOARD MARKS (Unit : mm)









PRINCIPAL PARTICULARS

1. PRINCIPAL DIMENSIONS

LENGTH	O.A.	176.99 M
LENGTH	B.P.	173.900 M
BREADTH	MLD.	30.000 M
DEPTH	MLD.	14.500 M
FULLY LOAD DRAFT EXT.		9.929 M

2. TONNAGE, CLASS, ETC.

GROSS TONNAGE (INTERNATIONAL)	22,285
NET TONNAGE (INTERNATIONAL)	11,151

CLASS ABS, +A1(E), +AMS, +ACCU, SHCM, ESDC, GRAB[20tonnes], CPS, UWILD, BWT, GP, TCM.
Descriptive Note: Box Shaped Bulk Carrier, SOLAS XII as applicable, Strengthened for the carriage of heavy cargoes where Nos. 2 & 4 holds may be empty.

NAVIGATION AREA	OCEAN GOING
FLAG	MARSHALL ISLANDS

3. DEADWEIGHT & CAPACITY

DEADWEIGHT (d ext.=9.929 M)	35,678 MT
CARGO HOLD CAPACITY (GRAIN)	45,626.4 M³

4. MAIN ENGINE

MITSUI M.A.N.–B&W 6S50ME–B8.3 x 1set
M.C.O. 6,780 kW X 108 rpm
C.S.O. 4,980 kW X 97.5 rpm
(73.5% M.C.O.)

5. SPEED

SERVICE (d mld.=9.900 M) at
C.S.O. (4,980 kW) with 15% SM — 14.0 KTS

6. COMPLEMENT

DECK		ENGINE		BUSINESS	
CAPTAIN	1	CHIEF ENGINEER	1		
CHIEF OFFICER	1	1ST ENGINEER	1		
2ND OFFICER	1	2ND ENGINEER	1	ELEC. OFF.	1
3RD OFFICER	1	3RD ENGINEER	1		
				OFFICER TOTAL (9P)	
BOATSWAIN	1	NO.1 OILER	1	CHIEF STEW'D	1
				PETTY OFFICER TOTAL (3P)	
AB SEAMAN	3	OILER	3	COOK	1
SEAMAN	2	MOTOR MAN	1		
				CREW TOTAL (10P)	

OFF'S SPARE (J/OFF. CLASS)	1P
PILOT (J/OFF. CLASS)	1P
CREW'S SPARE	1P
GRAND TOTAL	25P

KEEL LAID	24th Oct., 2014
LAUNCHED	23rd Dec., 2014
DELIVERED	26th Mar., 2015

FINISHED PLAN

SHIP PLANNING DEPARTMENT GENERAL DESIGN GROUP	SHIP NAME: KS FLORA	SHIP NO.: SC222
APPROVED BY: (signature)	一般配置図及び 船体容積図	
CHECKED BY: KM	GENERAL ARRANGEMENT AND CAPACITY PLAN (WITH DEADWEIGHT SCALE)	
DRAWN BY: (signature)		
DATE: Mar. 26. 2015	SCALE: 1/200	DRAWING NO.: 130000
LIST NO. HG-3	TSUNEISHI SHIPBUILDING CO., LTD.	

常石造船株式会社 DESIGN DIVISION Mar. 26. 2015 設計本部 TSUNEISHI SHIPBUILDING CO.,LTD.