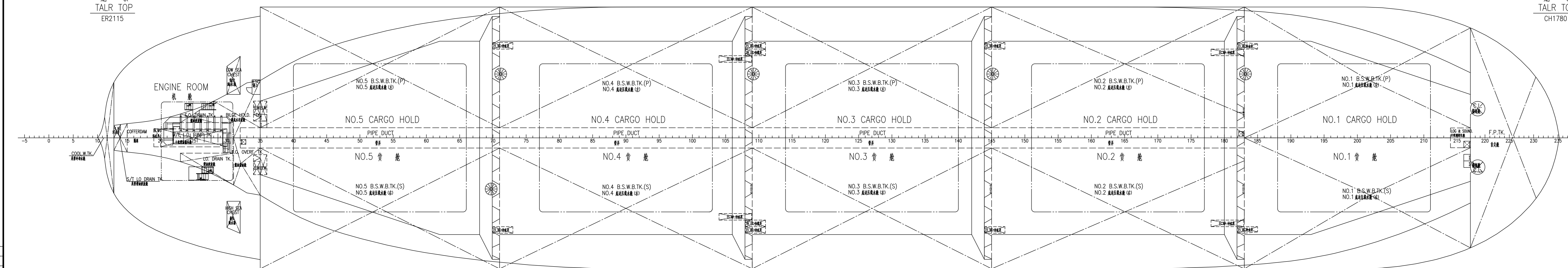


上甲板  
UPPER DECK  
C18500/S18000



船頂  
TALR TOP  
ER2115

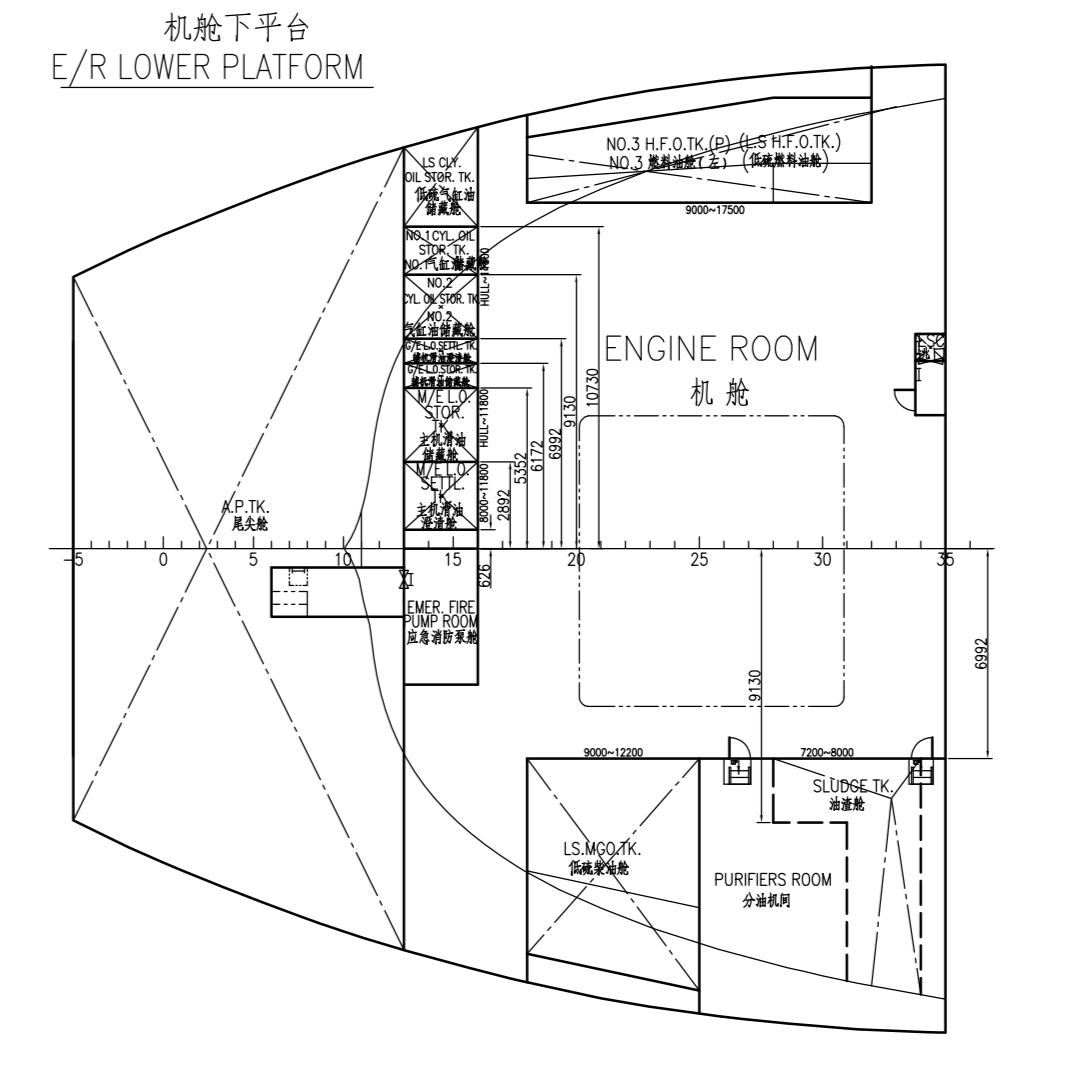
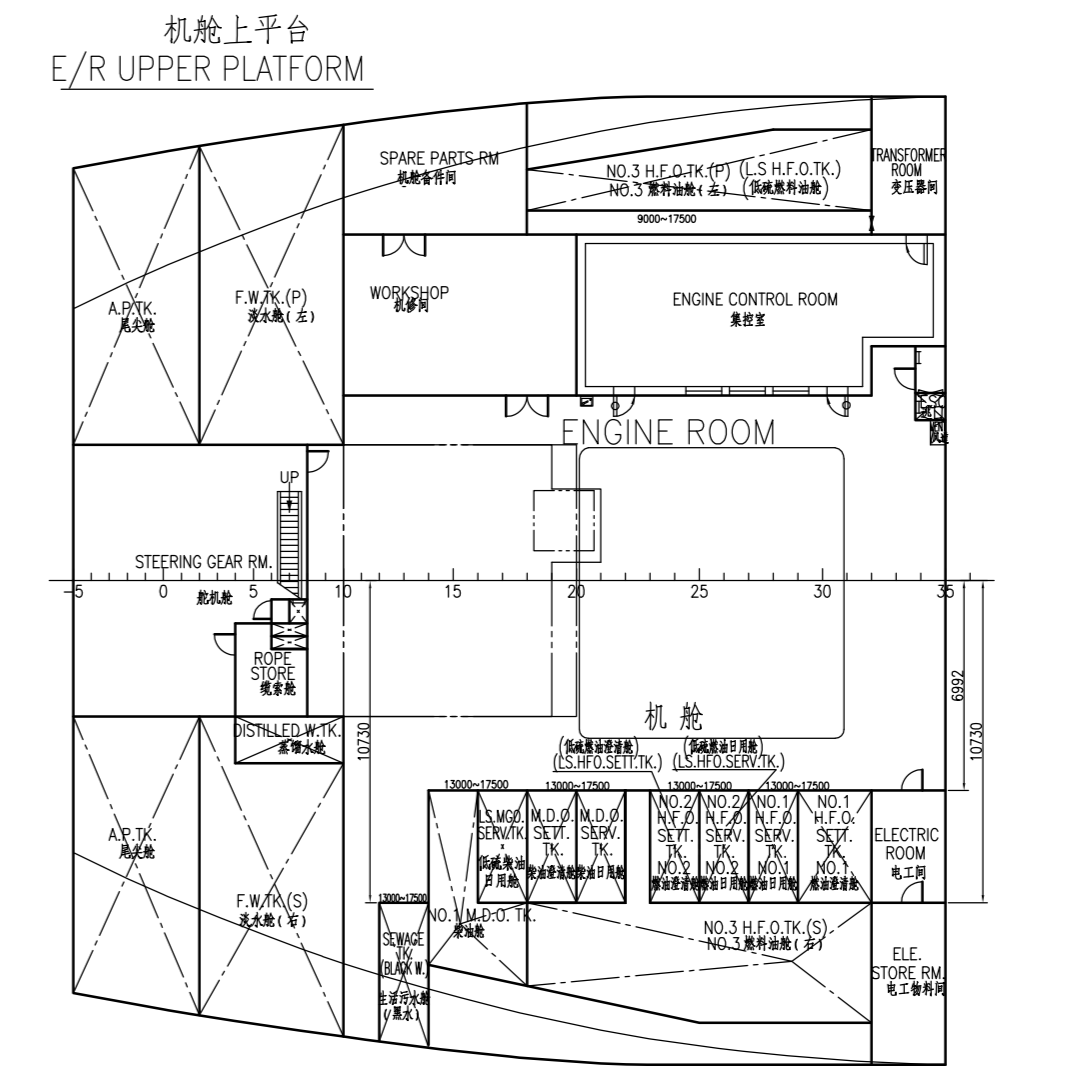
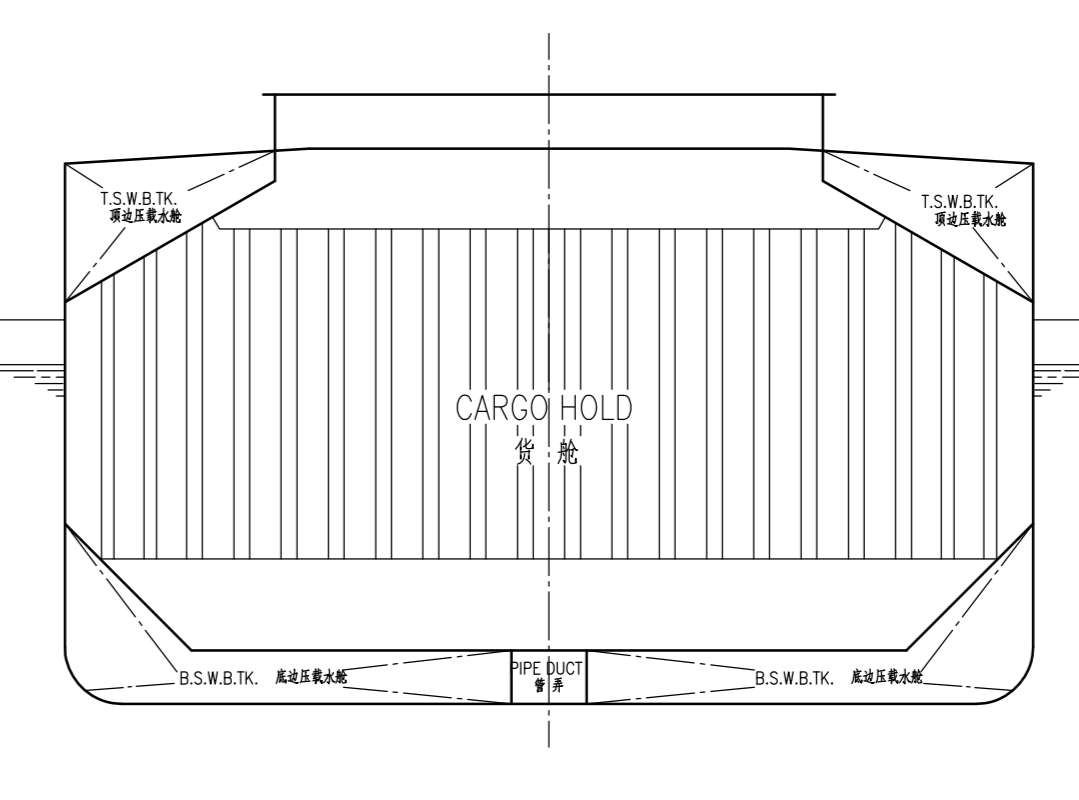
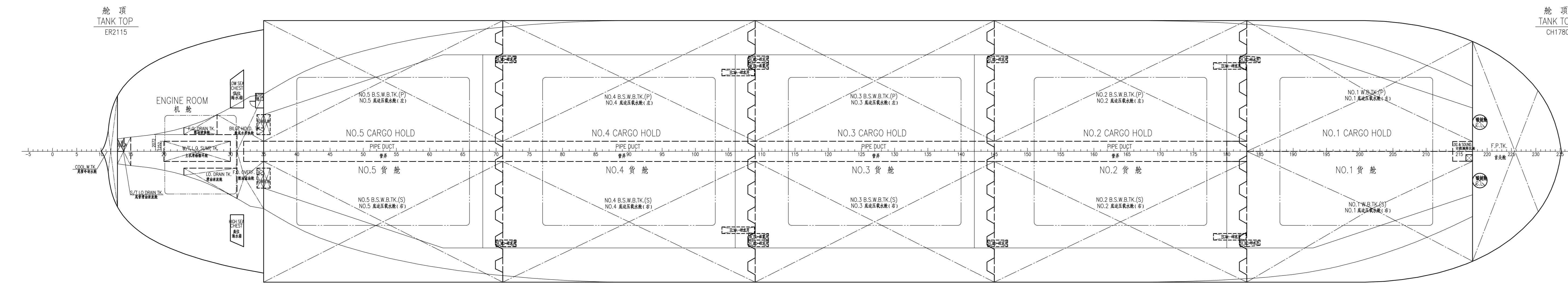
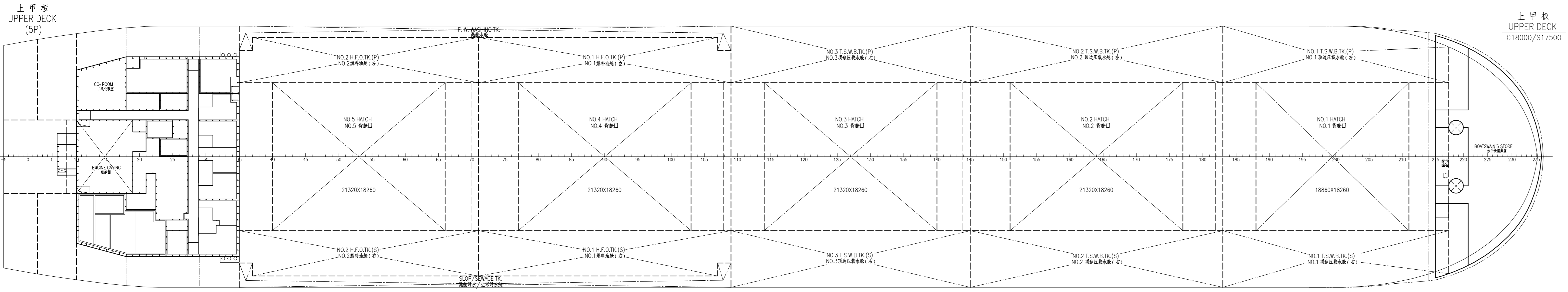
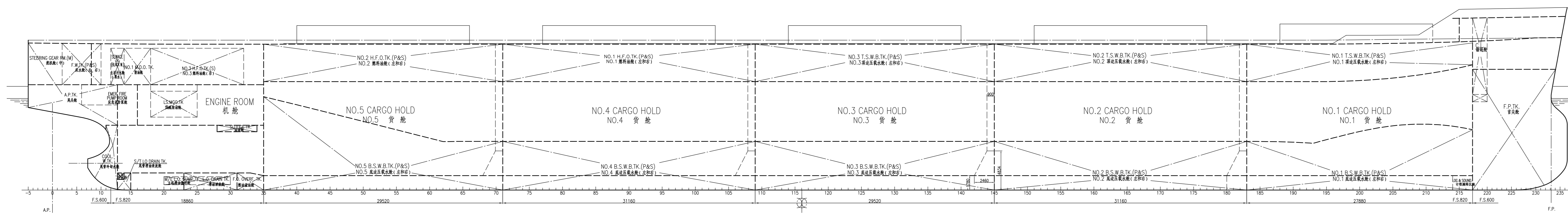
船頂  
TALR TOP  
CH1780

主要尺度及数据  
PRINCIPAL DIMENSIONS

总长	LENGTH O.A.	189.99 m
垂线间长	LENGTH B.P.	185.00 m
型宽	BREADTH MLD.	32.26 m
型深	DEPTH MLD.	18.00 m
设计吃水	DESIGNED DRAFT	11.30 m
载重线吃水	SCANTLING DRAFT	12.80 m
载重量	DEADWEIGHT (AT SCANTLING DRAFT)	abt. 57,000 t
主引擎	MAIN ENGINE	MAN-B&W 6550MC-C 1 set
	M.C.R.	9480KW x 127r/min
服务速度	SERVICE SPEED (AT DESIGN DRAFT)	abt. 14.20 Kn
续航力	ENDURANCE	abt. 18,000 n.mile
船员 complement	COMPLEMENT	26 Persons
分类	CLASSIFICATION	LR+100A1 Bulk Carrier, CSR,BC-A,Holds No.2&4 may be empty, ESP, U, ShipRight(CM), *IWS, GRAB[20], +LMC,UWS, with the descriptive notes "PLHT, ShipRight BWMP(S+), ShipRight(SCM)"

合 格  
特 准  
修 改  
电 气  
船 壳

57000DWT BULK CARRIER		DES. STA.	57000吨级	最终图号	HT416-100-04
GENERAL ARRANGEMENT PLAN		图号	HT416-100-04	比例	1:200
CLASS	LR	DATE		SCALE	1:200



NAME	FRMN	FRMAX	FILL	VNET	WEIGHT	L.C.G	T.C.G	V.C.G
Cargo : Density=1.025 t/m <sup>3</sup>								
NO.1 CARGO HOLD	182	217	1.00	15309.86	160.513	0.000	10.584	
NO.2 CARGO HOLD	144	183	1.00	15333.25	131.364	0.000	10.270	
NO.3 CARGO HOLD	108	145	1.00	14553.08	101.023	0.000	10.295	
NO.4 CARGO HOLD	70	109	1.00	16333.27	70.684	0.000	10.270	
NO.5 CARGO HOLD	35	71	1.00	13404.64	41.070	0.000	10.693	
SUBTOTAL				71634.09				

NAME	FRMN	FRMAX	FILL	VNET	WEIGHT	L.C.G	T.C.G	V.C.G
Water Ballast : Density=1.025 t/m <sup>3</sup>								
F.P.TK	217	FORE	1.00	2018.63	2069.10	179.505	0.000	7.949
NO.1 B.S.W.B.TK	183	217	1.00	858.81	860.28	160.809	8.285	1.907
NO.2 B.S.W.B.TK	145	183	1.00	858.81	860.28	160.809	-8.285	1.907
NO.3 B.S.W.B.TK	109	145	1.00	481.95	494.00	160.175	13.093	16.716
NO.4 B.S.W.B.TK	71	109	1.00	481.95	494.00	160.175	-13.093	16.716
NO.5 B.S.W.B.TK	35	71	1.00	1047.30	1073.49	131.737	-10.038	1.496
NO.1 T.S.W.B.TK	145	183	1.00	601.70	616.74	131.881	13.378	16.569
NO.2 T.S.W.B.TK	109	145	1.00	601.70	616.74	131.881	-13.378	16.569
NO.3 T.S.W.B.TK	71	109	1.00	1001.01	1026.03	101.500	10.085	1.491
NO.4 T.S.W.B.TK	35	71	1.00	1001.01	1026.03	101.500	-10.085	1.491
NO.1 S.S.W.B.TK	109	145	1.00	570.01	584.26	101.500	13.378	16.569
NO.2 S.S.W.B.TK	71	109	1.00	570.01	584.26	101.500	-13.378	16.569
NO.3 S.S.W.B.TK	35	71	1.00	1039.46	1065.45	71.347	9.999	1.498
NO.4 S.S.W.B.TK	71	109	1.00	1039.46	1065.45	71.347	-9.999	1.498
NO.5 S.S.W.B.TK	35	71	1.00	998.28	1023.24	39.658	9.571	2.874
A.P.TK	35	71	1.00	998.28	1023.24	39.658	-9.571	2.874
SUBTOTAL				1117.69	1143.63	2.075	0.018	12.699

NAME	FRMN	FRMAX	FILL	VNET	WEIGHT	L.C.G	T.C.G	V.C.G
Heavy Fuel Oil : Density=0.8 t/m <sup>3</sup>								
NO.1 H.F.O.TK	71	109	0.98	410.64	394.37	70.831	12.495	16.837
NO.2 H.F.O.TK	35	71	0.98	410.64	394.37	70.831	-12.495	16.837
NO.3 H.F.O.TK	35	71	0.98	388.55	373.16	41.148	-12.493	16.837
NO.4 H.F.O.TK	18	32	0.98	200.51	192.57	18.583	13.195	13.619
NO.5 H.F.O.TK	18	32	0.98	200.51	192.57	18.583	-13.195	13.619
NO.1 H.F.O. SERV. TK	27	29	0.98	26.47	25.42	20.320	-8.846	15.252
NO.2 H.F.O. SERV. TK	25	27	0.98	26.47	25.42	18.680	-8.846	15.252
NO.1 H.F.O. SETT. TK	29	32	0.98	39.70	38.13	23.370	-8.846	15.252
NO.2 H.F.O. SETT. TK	23	25	0.98	26.47	25.42	17.040	-8.846	15.252
SUBTOTAL				2128.12	2043.84			

NAME	FRMN	FRMAX	FILL	VNET	WEIGHT	L.C.G	T.C.G	V.C.G
Diesel Oil : Density=0.85 t/m <sup>3</sup>								
M.D.O. TK	14	18	0.98	65.79	54.81	10.188	-10.787	15.229
M.D.O. SERV. TK	20	22	0.98	26.47	22.05	14.580	-8.846	15.252
M.D.O. SETT. TK	18	20	0.98	26.47	22.05	12.940	-8.846	15.252
L.S. M.G.O. TK	18	25	0.98	98.32	81.90	15.098	-9.762	10.678
L.S. M.G.O. SERV. TK	16	18	0.98	27.03	22.52	11.300	-8.861	15.205
SUBTOTAL				244.08	203.32			

NAME	FRMN	FRMAX	FILL	VNET	WEIGHT	L.C.G	T.C.G	V.C.G
Lubricating Oil : Density=0.9 t/m <sup>3</sup>								
M/E L.O. SUMP TK	20	30	0.98	17.34	15.29	17.860	0.000	1.151
NO.1 C.T.O.L. STOR. TK	13	16	0.98	12.23	10.79	9.314	9.892	10.159
NO.2 C.T.O.L. STOR. TK	13	16	0.98	20.21	17.83	9.296	8.033	9.788
M/E L.O. STOR. TK	13	16	0.98	26.81	23.64	9.289	4.112	9.488
M/E L.O. SETT. TK	13	16	0.98	20.76	18.31	9.250	1.758	9.862
G/E L.O. STOR. TK	13	16	0.98	8.63	7.61	9.289	5.760	9.567
G/E L.O. SETT. TK	13	16	0.98	8.41	7.42	9.291	6.580	9.633
L.S. C.T.O.L. STOR. TK	13	16	0.98	8.99	7.93	9.405	11.603	16.602
SUBTOTAL				123.38	108.82			

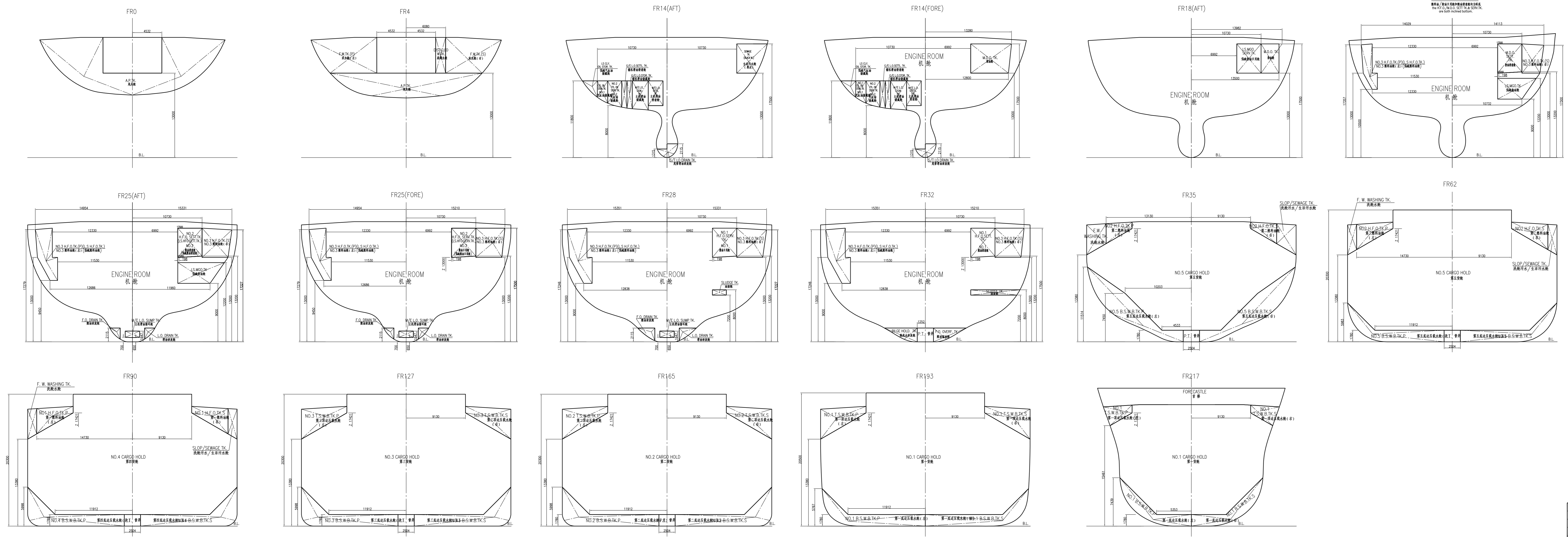
NAME	FRMN	FRMAX	FILL	VNET	WEIGHT	L.C.G	T.C.G	V.C.G
Fresh Water								
F.W.P.P.	2	10	1.00	232.72	232.72	3.647	9.103	15.815
F.W.TK.S	2	10	1.00	200.87	200.87	3.560	-9.697	15.825
DISTILLED W.TK.	4	10	1.00	31.82	31.82	4.200	-5.352	15.750
SUBTOTAL				465.41	465.41			

NAME	FRMN	FRMAX	FILL	VNET	WEIGHT	L.C.G	T.C.G	V.C.G
Miscellaneous : Density=1 t/m <sup>3</sup>								
COOL. W. TK.	7	13	0.98	29.59	29.00	8.843	0.000	3.377
F.W. WASHING TK.	35	109	0.98	372.49	365.04	56.400	15.363	15.868
SLOP/SEWAGE TK.	35	109	0.98	372.49	365.04	56.400	-15.363	15.868
SLUDGE TK.	28	34	0.98	18.44	18.07	23.471	-10.113	7.595
BRILE HOLD. TK.	28	35	0.98	33.63	32.98	23.646	2.975	1.231
F.O. DRAN. TK.	23	28	0.98	7.40	7.25	18.627	2.559	1.455
F.O. OVERT. TK.	31	35	0.98	24.63	24.14	24.367	-2.956	1.180
L.O. DRAN. TK.	23	31	0.98	16.43	16.10	20.299	-2.857	1.421
S/T LO DRAN. TK.	13	15	0.98	6.54	6.41	8.948	-0.110	1.085
SEWAGE TK.	12	14	0.98	27.72	27.17	8.032	-12.675	15.382
SUBTOTAL				909.40	891.22			

NOTE:  
 1. T.C.G. (-) STARBOARD SIDE (+) PORT SIDE  
 2. ORIGINAL COORDINATE OF L.C.G. IS LOCATED AT FRAME 0 (A.P.)

主要尺度及数据  
 PRINCIPAL DIMENSIONS

总长	LENGTH O.A.	189.99 m
总长	LENGTH B.P.	185.00 m
总宽	BREADTH MLD.	32.26 m
总深	DEPTH MLD.	18.00 m
设计吃水	DESIGNED DRAFT	11.30 m
结构吃水	SCANTLING DRAFT	12.80 m
载重量	DEADWEIGHT (AT SCANTLING DRAFT)	56876.5 t
主机	MAIN ENGINE	MAN-B&W 6550MC-C1 set
	M.C.R.	9480kW x 127r/min
服务航速	SERVICE SPEED (AT DESIGN DRAFT)	obt. 14.20 Km
续航力	DURANCE	obt. 18,000 mile
船员编制	CREW	26 Persons



MARKS	REVISION	DATE	BY	DATE	BY

57000DWT BULK CARRIER  
 57000吨散货船

FIANT DESIGN 完工设计  
 SC4439(H)G4-103-02

SHANGHAI MERCHANTSHIP  
 DESIGN RESEARCH INSTITUTE, CO., LTD.  
 上海船舶研究设计院

SCALE: 1:250  
 比例尺: 1/1 比例尺: 1.00m

DATE: 2014.10.20

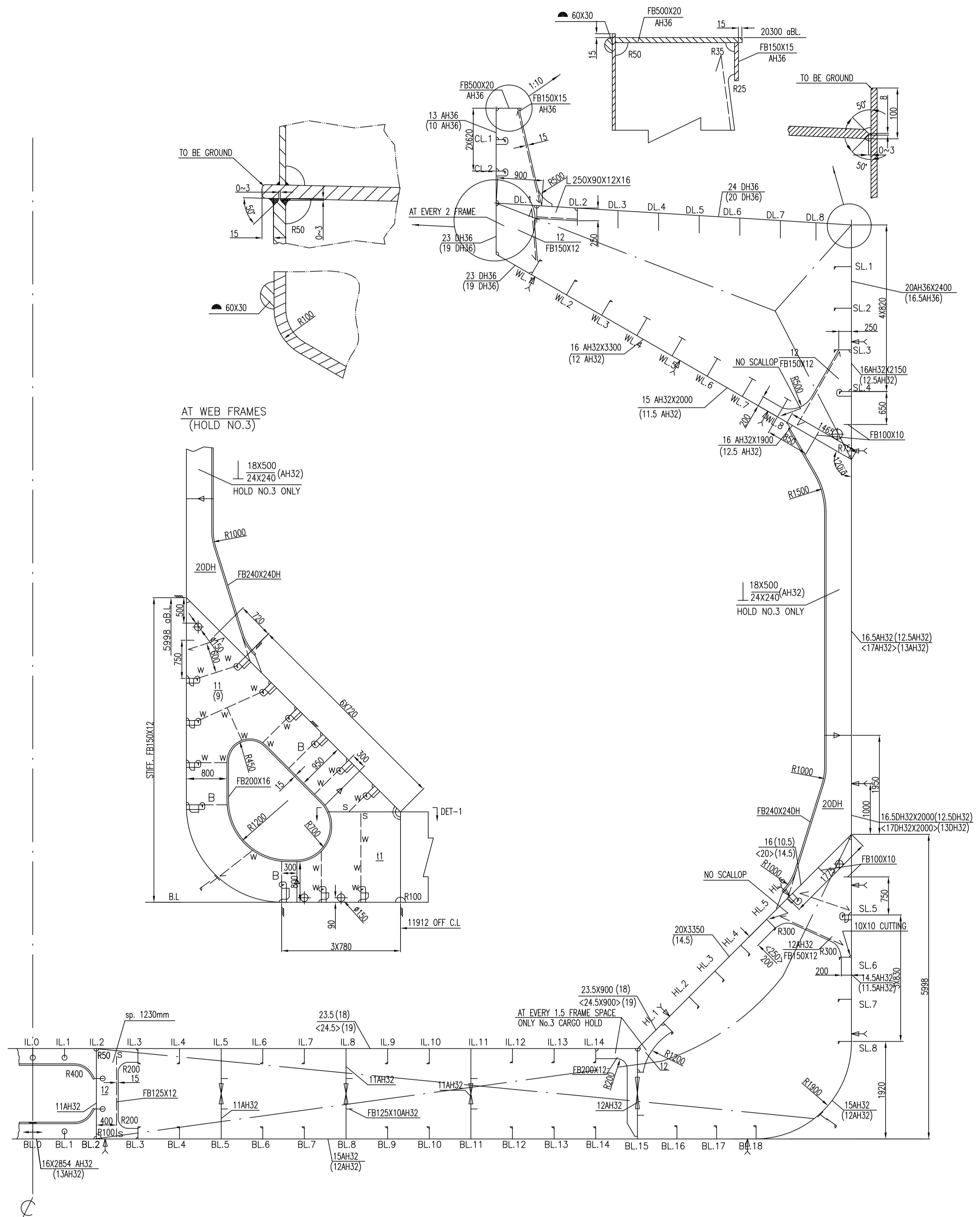
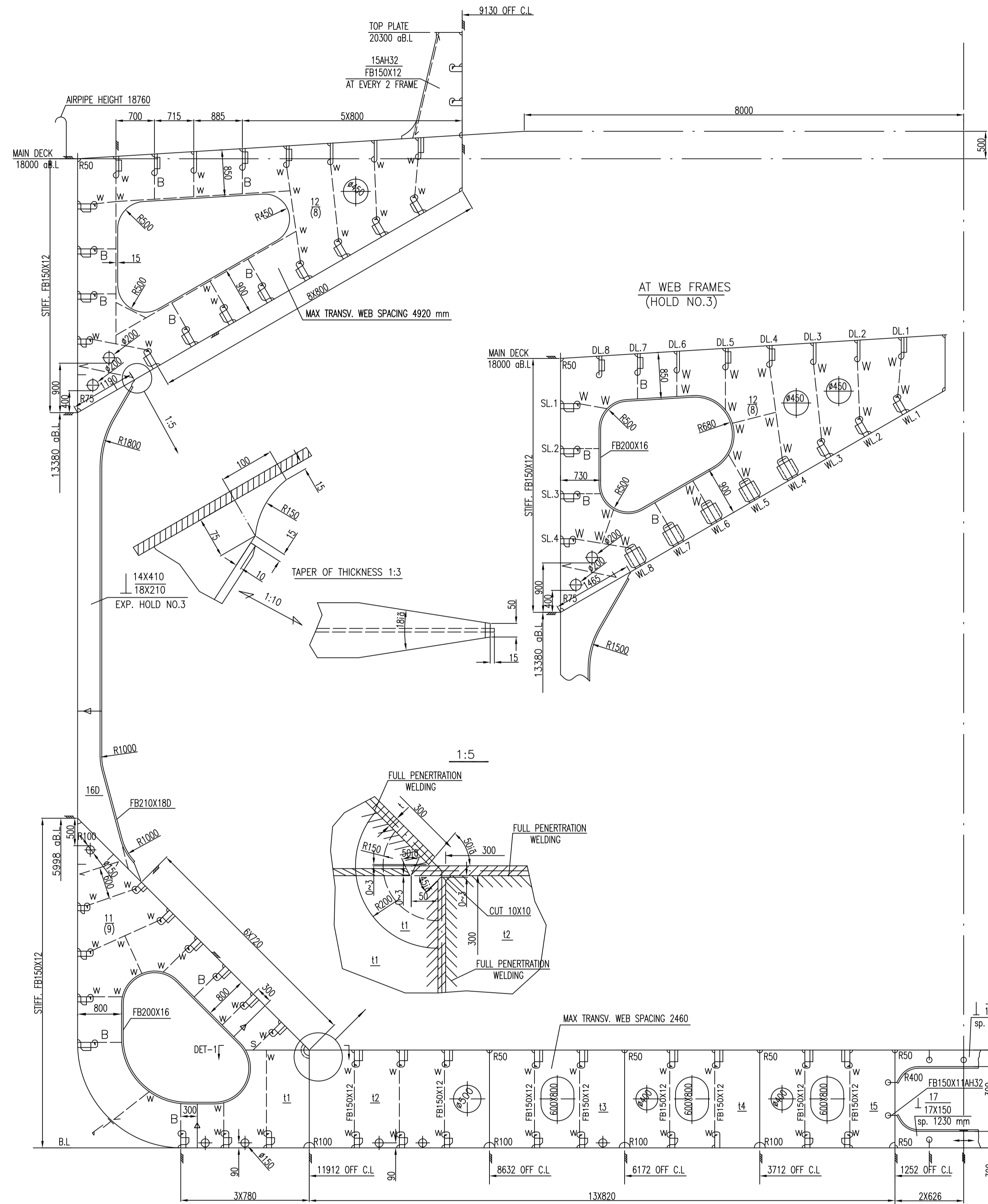
DESIGNER: 设计人: 王明

CHECKER: 校核人: 李强

VERIFIER: 审核人: 张华

APPROVER: 批准人: 陈伟

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 比例尺: 1:250



**LONGITUDINAL SCANTLING**

SECTION	SCANTLING	MATERIAL	MARK	
			UPPER	LOWER
BL.0	L8X300/10X150 AH32	CL.2		HP180X9 AH32
BL.1	FB150X12 AH32	DL.1-8		FB340X25 AH36
BL.3-14	HP240X12 AH32			
BL.16-18	HP260X11 AH32			
IL.0-1	FB180X12 (AH32)	WL.1-3		[HP320X12 AH36] [T8X380/15X150 AH36]
IL.3-10	[HP260X11 AH32] [HP300X11 AH32]	WL.4-8		[HP320X12 AH36] [HP340X14 AH36]
IL.12-14	[HP260X11 AH32] [HP280X12 AH32]	HL.1-2		[HP220X10 AH32] [HP260X12 AH32]
SL.1-3	HP350X12 AH36	HL.3-5		[HP220X10 AH32] [HP260X11 AH32]
SL.4	HP240X12 AH32			
SL.5	HP180X10 AH32			
SL.6-8	HP240X10 AH32			

**PRINCIPAL PARTICULARS**

LENGTH SCANTLING	189.99 m
LENGTH B.P.	185.00m
BREADTH	32.26m
DEPTH	18.0 m
SCANTLING DRAFT (MOULD)	12.8 m
CAMBER	0.50m
CR(MOULD)	0.876
SERVICE SPEED	14.2 Kn
<b>LOAD ON INNER BOTTOM (MAX)</b>	
IN NO.1,3&5 HOLDS	25 1/m <sup>2</sup>
IN NO.2&4 HOLDS	20 1/m <sup>2</sup>
<b>DESIGN MAX SWBM:</b>	
1780000 KN/m(Hogging Intact)	
-1220000 KN/m(Sagging Intact)	
2260000 KN/m(Hogging Flooding)	
-2400000 KN/m(Sagging Flooding)	
<b>CLASS LR</b>	
100A1 Bulk Carrier, CSR, BC-A Holds No.2&4 may be empty. ESP, LI, ShipRight(CM), *MS, ORG[20], +ML, C.M.S., with the descriptive notes "P.H.T., ShipRight SWMP(S+F), ShipRight(SCM)"	
<b>STEEL COIL LOADING:</b> 25 tonnes/2 TERS, L=1.6m 6 DUNNAGE SUPPORTING ONE STEEL COIL	

**REMARKS**  
 [ ]---No.2 & No.4 CARGO HOLD  
 <>---No.3 CARGO HOLD ONLY  
 The floor plate \* to be decided by FEM analysis  
 F.P.: FULL PENETRATION WELDING  
 NOTES:  
 ALL SCANTLINGS MARKED 'H' & 'DH' TO BE AH32/DH32.  
 ALL SCANTLINGS WITHOUT STATED TO BE MILD STEEL.  
 ALL SCANTLINGS ARE SUBJECT TO CLASS APPROVAL.  
 FRAME SPACE IN WAY OF CARGO HOLD IS 820MM.

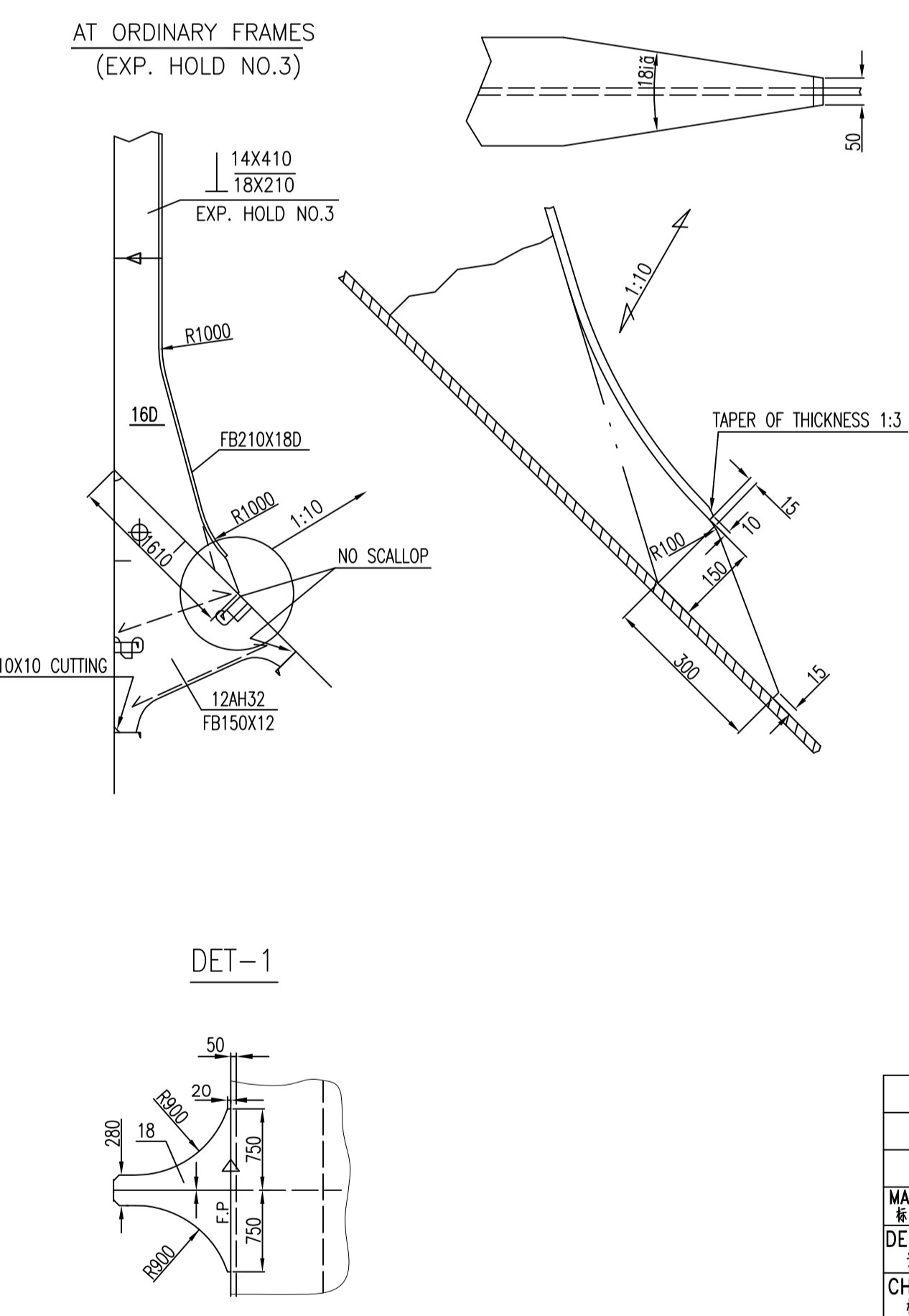
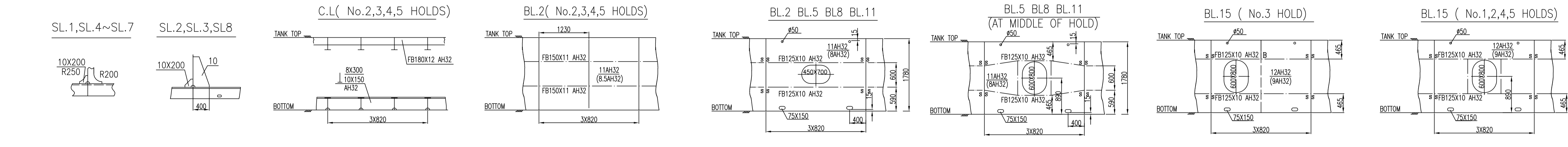
**FLOOR SCANTLING ( NO.3 CARGO HOLD )**

FLOOR PLATE	FR12	FR15	FR18	FR21	FR24	FR27	FR30	FR33	FR36	FR39	FR42	FR45
11	14	14	14	16	16	16	16	16	14	14	--	--
12	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
13	12	12	12	12	12	12	12	12	12	12	12	12
14	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)
15	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)

**FLOOR SCANTLING ( NO.2,4 CARGO HOLD )**

FLOOR PLATE	FR74	FR77	FR80	FR83	FR86	FR89	FR92	FR95	FR98	FR101	FR104	FR107	FR110	FR113	FR116	FR119
11	14	14	14	14	16	16	16	16	14	14	--	--	--	--	--	--
12	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)
13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
14	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)
15	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)



**57000DWT BULK CARRIER**  
**57000噸散貨船**

DESIGN NO: HT415-110-04  
 MIDSHIP SECTION  
 橫剖面圖

CLASS: LR

AREA: 0.75 m<sup>2</sup>

MARKS	DESIGNED	CHECKED	STAND.	VERIFIED	APPROVED
DATE	DATE	DATE	DATE	DATE	DATE