

SHEET I

Section in way of 4'-0" Hatch

MODULUS OF SECTION.

RETAIN

NAME:—

Particulars of Vessel *1/2 CADILLAC* 530 x 66.5 x 34.00

Height of Assumed Axis above Keel 20.00

BELOW ASSUMED AXIS.

ITEM.	SCANTLING.	AREA.	h.	Ah.	Ah ² .	d.	Ad ² .
AT KEEL ...	$\frac{1}{2}(52" \times 1.24")$	32.2	20.05	645	12950	—	
" " ...	$6 \times 6 \times .60$	6.8	19.87	135	2684		
ENTRE GIRDER PLATE ...	$(55" \times .54") \frac{1}{2}$	14.8	17.7	262	4640	4.58	311.0
" " BOTTOM ANGLES	$(65" \times .54") \frac{1}{2}$	16.3	13.3	217	2886	5.04	414.0
" " TOP ANGLES	$(41" \times .48") \frac{1}{2}$	16.1	7.8	125	980	5.58	502.0
ENTRE STRAKE TANK TOP ...	$(69" \times .49") \frac{1}{2}$	16.6	2.875	47	137	5.75	549.0
ARGON PLATE ...	$11 \times 14 \times .14$	15.58	18.92	2946	55750		
" ANGLES ...							
BOTTOM PLATING ...	$3/32" \times .84"$	263.4	19.75	5195	102500	—	
BILGE PLATING ...	$138" \times .74"$	102.1	17.7	1809	32000	6.0	3680.0
SIDE PLATING ...	$188" \times .70"$	131.6	6.96	916	6360	15.66	32210.0
TANK TOP PLATING ...	$11 \times 32 \times .54$	8.8	4.16	36	152	—	
No. 1 SIDE STRINGER PLATE	$12 \times 32 \times .50$	9.1	6.8	62	421	—	
" " " ANGLES	$12 \times 32 \times .56$	9.9	9.37	93	870	—	
" " " ANGLES	$12 \times 32 \times .66$	11.2	12.04	135	1628	—	
No. 2 " " PLATE	$14 \times 32 \times .54$	12.2	14.62	178	2618	—	
" " " ANGLES	$16 \times 32 \times .54$	12.8	16.66	213	3550	—	
" " " ANGLES	$17 \times 32 \times .54$	13.2	18.12	240	4358	—	
No. 3 " " PLATE	$10 \times 32 \times .53$	4.1	4.29	17	75	—	
" " " ANGLES	$12 \times 32 \times .44$	4.1	6.87	28	194	—	
SIDE KEELSON PLATE	$1/2(12 \times 32 \times .44)$	4.1	9.62	40	380	—	
" " TOP ANGLES	$1/2(12 \times 32 \times .50)$	4.5	12.33	55	696	—	
" " BOTTOM	$1/2(12 \times 32 \times .56)$	4.9	14.95	73	1095	—	
" " " " "	$1/2(12 \times 32 \times .62)$	5.4	17.32	93	1622	—	
TOTALS BELOW ASSUMED AXIS.		872.3		13579	238578		37666.0

ABOVE ASSUMED AXIS.

ITEM.	SCANTLING.	AREA.	h.	Ah.	Ah ² .	d.	Ad ² .
TOP DECK STRINGER	83×1.00	83.0	22.25	1848	41180	—	
" " PLATING	$35" \times .80"$	28.0	23.62	662	15660	—	
" " ANGLE	$99" \times .60"$	59.4	22.9	1358	30940	—	
" " PLATING	$9 \times 72 \times .48$	49.5	22.54	1134	25980	—	
" " PLATING	$8 \times 8 \times .72$	11.4	22.25	254	5650	—	
2ND DECK STRINGER	$144" \times .72"$	104.8	23.25	2418	56000	—	
" " ANGLE	$18 \times 2 \times .50$	92.4	14.66	1354	19820	—	
3RD DECK STRINGER	$5 \times 8 \times 3 \times .46$	28.1	14.25	400	5700	—	
" " PLATING	$144 \times .50$	72.2	6.5	470	3056	—	
3RD DECK STRINGER	$48 \times .54"$	25.9	7.00	181	1267	—	
" " ANGLE	$5 \times 9 \times 3 \times .50$	34.7	6.16	214	1320	—	
C.L.B. PLATING	$(72 \times .44") \frac{1}{2}$	13.8	2.92	47	139	6.0	568
4TH DECK STRINGER	$(69 \times .42") \frac{1}{2}$	14.5	8.5	123	1045	5.75	479
" " ANGLE	$(72 \times .40") \frac{1}{2}$	14.4	14.00	202	2820	6.00	518
" " PLATING	$(83 \times .65") \frac{1}{2}$	26.9	20.20	545	1100	6.91	1288
" " PLATING	$(8 \times 3 \times .40) \frac{1}{2}$	2.5	20.4	51	1040	—	
" " PLATING	$(8 \times 3 \times .40) \frac{1}{2}$	2.5	17.75	44	788	—	
" " PLATING	$3 \times 8 \times 3 \times .44$	2.7	15.12	41	618	—	
" " PLATING	$3 \times 8 \times 3 \times .44$	2.7	12.4	33	412	—	
SUBSTRATE	$5 \times 8 \times 3 \times .44$	2.9	9.8	28	278	—	
" " PLATING	$4 \times 8 \times 3 \times .44$	2.9	7.12	20	147	—	
" " PLATING	$4 \times 8 \times 3 \times .44$	2.9	4.87	16	78	—	
" " PLATING	$5 \times 10 \times 3 \times .44$	3.5	2.66	9	25	—	
STRAKE BELOW SUBSTRATE	$2/10 \times 32 \times .48$	3.7	1.00	4	4	—	
SHELL PLATING	$63" \times 1.14$	71.9	20.25	1452	29400	5.25	1982
SIDE STRINGER PLATE	$72 \times .91$	65.6	14.94	982	14680	6.00	2400
" " ANGLE	$171 \times .70$	119.7	6.2	740	4590	14.25	24460
" " ANGLE	$18 \times .54"$	9.7	7.85	76	599	1.5	21
" " ANGLE	$190 \times .46"$	87.4	15.7	1461	22980	15.91	22100
" " ANGLE	$8 \times 3 \times .40$	5.0	20.3	101	2060	—	
" " ANGLE	$8 \times 3 \times .40$	5.0	17.75	89	1678	—	
" " ANGLE	$8 \times 3 \times .44$	5.7	12.37	70	872	—	
" " ANGLE	$9 \times 3 \times .44$	6.6	9.75	64	626	—	
TOTALS ABOVE ASSUMED AXIS.		1064.3		16491	302456		53816
" BELOW ASSUMED AXIS.							
SUM OR DIFFERENCE							
Ad ² /12							

SUMMARY.

MOMENT OF INERTIA ABOUT ASSUMED AXIS ...	(1.)
NEUTRAL AXIS ABOVE ASSUMED AXIS (x) ...	(2.)
TOTAL AREA $\times x^2$...	(3.)
CORRECTED INERTIA (ONE SIDE ONLY) = (1.) - (3.) ...	(4.)
CORRECTED INERTIA (BOTH SIDES) ...	
VALUE OF "Y" AT HEEL OF GUNWALE BAR ...	
MODULUS OF SECTION AT GUNWALE ...	
VALUE OF "Y" AT KEEL ...	
MODULUS OF SECTION AT KEEL ...	

Initials *HSN*Date *1-12-31*

N.B.—The assumed axis is to be taken below lowest deck. The Top Deck is the uppermost strength deck, and other decks are to be numbered from that deck.

from that deck.

W370-0029

20.428

21.758

SHEET I

The

ITEM.
PLAT KEEL
" " <i>Angle</i> ..
ENTRE <i>Side Plate</i> GIRDER PLAT
" " BOTTOM
" " TOP
ENTRE STRAKE TAN
<i>Side Plate</i> MARGIN PLATE
" ANGLES
BOTTOM PLATING
BILGE PLATING
SIDE PLATING
<i>Side Plate</i> TANK TOP PLATING
No. 1 SIDE STRING
" " "
No. 2 " "
<i>Side Plate</i> " " "
No. 3 " "
" " "
SIDE KEELSON PL
" " To
" " Be
TOTALS <small>BELO ASSU</small>

RETAIN

N.B.—The as
deck.
deck,
from

from



© 2021

Lloyd's Register
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