

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name HITACHI 3752	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 197.000 Breadth 26.400 Depth 14.000					Date of Survey 5/2/55
Moulded displacement at moulded draught = 85 per cent. of moulded depth 49,160 tons (excluding bossing)					Surveyor's Signature
Coefficient of fineness for use with Tables .787 (.789 per builders)					Particulars of Classification +100A1 C.P.L.B.

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 14.000	(a) Where D is greater than Table depth (D - Table depth) R = 8.33(14.031 - 13.133)30 = +22.4%	Moulded Breadth (B) = 26.400
Stringer plate ... 31	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 8.98	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{26.400 \times 12}{50} = \mathbf{528}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 550
Depth for Freeboard (D) = 14.031		Difference = 22
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{22}{4} \times .5814 = \mathbf{-3.2\%}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed EQUIV...	41.918	41.918	2.600		41.918
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed EQUIV...	13.942	13.942	2.600		13.942
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	26.270	26.270	2.600		26.270
" overhang ...	680	340			340
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	82.810	82.470			82.470

Standard Height of Superstructure **2.290 m**

" " R.Q.D. **1067%**

Deduction for complete superstructure **1067%**

Percentage covered $\frac{S}{L} = \mathbf{42.03}$

" " $\frac{S_1}{L} = \mathbf{41.86}$

" " $\frac{E}{L} = \mathbf{32.86}$

Percentage from Table, Line A TANKER **32.86** (corrected for absence of forecastle (if required))

Percentage from Table, Line B. (corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

Deduction = $1067 \times .3286 = \mathbf{-351\%}$

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...	1895	1	1895	870	870	1	870
$\frac{1}{2}$ L from A.P. ...	842	4	3368	80	80	4	320
$\frac{3}{4}$ L " ...	211	2	422			2	
Amidships ...		4				4	
$\frac{3}{4}$ L from F.P. ...	421	2	842			2	
$\frac{1}{2}$ L " ...	1684	4	6736	50	50	4	200
F.P. ...	3790	1	3790	1930	1930	1	1930
Total ...			17053				3320

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

Deficient
sheer

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{13733 - 3320}{18} = \mathbf{+412\%}$

If limited on account of midship superstructure. $\frac{5398}{18}$ If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Deduction for Fresh Water.

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

	+	-
2970		
3204		
3208		
224		
351		
412		
3		
282		
636		
354		
Summer Freeboard = 3486		

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	...
Fresh Water Line	"
Tropical Line	"
Winter Line below	"
Winter North Atlantic Line	"

Tropical Fresh Water Freeboard	...
Fresh Water	"
Tropical	"
Winter	"
Winter North Atlantic	"

3752.

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Poop

Length at side 40.580
 $\frac{+ (26.24 + 8.00) \times 2050}{2 \times 26.24} 1.338$
 Equiv. length 41.918

Bridge.

4.400	1	4.400
4.230	4	16.920
3.700	1½	5.550
3.280	2	6.560
2.750	1	2.750
2.170	2	4.340
Say 1.000	½	.500
		<u>41.020</u>
		3.418

Length at side 10.850
 $14.268 \times \frac{25.800}{26.400}$

Equiv. length = 13.942

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____

"ALEXANDRA I"
 M/M.13365



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 Foundation