

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "HOI HUNG" ex "Fionia"	Official Number 196787	Nationality and Port of Registry British Hong Kong	Gross Tonnage 5347	Date of Build 1914	Port of Survey Hong Kong
Moulded Dimensions: Length 395.0 ft. Breadth 53.00 ft. Depth 30.00 ft. <input checked="" type="checkbox"/>					Date of Survey 2nd February, 1955.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 11260 tons					Surveyor's Signature <i>James R. Anderson</i>
Coefficient of fineness for use with Tables .738 <input checked="" type="checkbox"/>					Particulars of Classification +100A1 Awning deck with freeboard.

DEPTH FOR FREEBOARD (D). Moulded depth ... 30.00 Stringer plate04 3" Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = .25 \times 3945 = .10$ Depth for Freeboard (D) = 30.14	DEPTH CORRECTION. (a) Where D is greater than Table depth $(D - \text{Table depth}) R = (30.14 - 26.33) 3 = + 11.43"$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = 3.81 If restricted by superstructures <input checked="" type="checkbox"/>	ROUND OF BEAM CORRECTION. Moulded Breadth (B) 53.00 Standard Round of Beam = $\frac{B \times 12}{50} = 12.72$ Ship's Round of Beam = 13.25 Difference + .53" Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.53}{4} \times 3978 = -.05"$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>Equival.</i>	29.40	29.40	7.5	<input checked="" type="checkbox"/>	29.40
" overhang	21.1				1.09
R.Q.D. enclosed					
" overhang	167.73				
Bridge enclosed <i>(Liquid)</i>	167.73	167.73	7.5	<input checked="" type="checkbox"/>	167.73
" overhang aft	1.02	.77			.77
" overhang forward	2.00	1.00			1.00
F'cle enclosed	11.1				
" overhang	11.1				
Trunk and <i>FOSE (Equival.)</i>	38.80	38.80	7.5		38.80
" forward	.20	.15			.15
Tonnage opening aft					
" forward					
Total	239.15	237.85			237.85

Standard Height of Superstructure	7.45'
" " R.Q.D.	<input checked="" type="checkbox"/>
Deduction for complete superstructure	41.67"
Percentage covered $\frac{S}{L} =$	60.55
" " $\frac{S_1}{L} =$	60.22 <i>59.98</i>
" " $\frac{E}{L} =$	
Percentage from Table, Line A. 8B	46.37
(corrected for absence of fore-castle (if required))	
Percentage from Table, Line B.	
(corrected for absence of fore-castle (if required))	
Interpolation for bridge less than .2L (if required)	
Deduction = 41.67 \times 46.37	= -19.32"
	= -19.15"

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	49.50	1	49.50	42.39	39.00	1	39.00		
$\frac{1}{2}$ L from A.P.	22.03	4	88.12	27.18.5	18.50	4	74.00		
$\frac{1}{2}$ L "	5.45	2	10.90	8.50	5.00	2	10.00		
Amidships	0	4	0	00	0	4	0		
$\frac{1}{2}$ L from F.P.	10.89	2	21.78	28.75	8.75	2	17.50		
$\frac{1}{2}$ L "	44.05	4	176.20	293.0	33.00	4	132.00		
F.P.	99.00	1	99.00	72.40	74.00	1	74.00		
Total			445.50				346.50		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{99.00}{18} \left(\frac{.75 - .3028}{2} \right) = +2.35"$
 If limited on account of midship superstructure. ☒ **44.72** If limited to maximum allowance of 1 1/2 ins. per 100 ft. ☒

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 " =

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **30.25**
 Summer freeboard = **5.92**
 Moulded draught (d) = **24.33**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **5"**

Addition for Winter North Atlantic Freeboard ~~if required~~

5 1/2"

Deduction for Fresh Water.

Displacement in salt water at summer load water line **5' - 11" fbd.**
 $\Delta = 10825$ tons.
 Tons per inch immersion at summer load water line
 $T = 41.5$

Deduction = $\frac{\Delta}{40 T}$ inches
= 6"

TABULAR FREEBOARD

Correction for coefficient

738 + 68
1.36

1.418
1.36

11.43

19.32

2.35

.05

1.30

15.08

19.37

-4.29

Summer Freeboard = 68.65

5' 11"

5' 8 1/4"

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line

Tropical Fresh Water Line above Centre of Disc ... **11"**
 Fresh Water Line " " ... **6"**
 Tropical Line " " ... **5"**
 Winter Line below " " ... **5 1/2"**
 Winter North Atlantic Line " " ... **4"**

Tropical Fresh Water Freeboard ... **5' 0"**
 Fresh Water " " ... **5' 5"**
 Tropical " " ... **5' 6"**
 Winter " " ... **6' 4 1/2"**
 Winter North Atlantic " " ... **4"**

Freeboards as assigned by Danish Authorities now re assigned.

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.

Prop. Length to 13 frame = 26.92' ✓

Add $(8.33 \times 9.5) + (2.92 \times 2.5) + (6.17 \times 9.42)$ $\frac{144.56}{40.50}$ = + 3.57' ✓

Less $(4.0 \times 5.42) + (7.5 \times 3.0)$ $\frac{44.18}{40.50}$ = - 1.09 ✓

Equivalent Length = 29.40' ✓

No overhang. ✓

Bridge Length btwn frs 51 - 131 = 166.67' ✓

Add $(8.5 \times 10.0 \times 2)$ $\frac{170.0}{53.0}$ = + 3.21' ✓

Less $(18.25 \times 4.0) + (10.25 \times 4.0)$ $\frac{114.0}{53.0}$ = - 2.15 ✓

Equivalent Length = 167.73' ✓

Overhang aft = 2.08' - $(3.21 - 2.15)$ = 1.02' ✓

Overhang for'd = 2.00' ✓

Forecastle Length to 173 fr. = 36.92' ✓

Add $(6.25 \times 6.25 \times 2)$ $\frac{78.12}{35.0}$ = + 2.23' ✓

Less $(2.0 \times 2.92 \times 2)$ $\frac{11.68}{33.50}$ = - .35' ✓

Equivalent Length = 38.80' ✓

Overhang = 2.08 - $(2.23 - .35)$ = .20' ✓

Trade of ship Ocean going

Names of sister ships -

Builder's name and yard number Burmeister & Wain, Copenhagen.

Owners Shun Kee Navigation Co., Ltd.

Fee £ \$1,312.00

Tel. Lon. 20.00

" H.K. 14.00

Exp. 7.00

F.B. 1141



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