

D184.

J46

LLOYD'S REGISTER OF SHIPPING.

(CLASSIFICATION SOCIETY RECOGNISED BY THE JAPANESE GOVERNMENT)

SURVEY FOR FREEBOARD.

Ship's Name "TAKAO MARU"	Port of Registry Osaka.	Official No.	No. in R.B.	Gross Tonnage	Tonnage under Fbd. Deck = V 2830.4	Date of Launch 22nd April 1927.	Date when Built 1927	Report Number 42
Owners Osaka Shosen Kaisha.		Builders Uraga Dock Co.			Yard No. 317	Port of Survey Yokohama.		
Type of vessel Complete Superstructure	Particulars of Classification * 100 A.1. with freeboard		Position of Freeboard Deck 2nd Deck.		Date of Survey While building.			
					Name of Surveyor J. Crichton & R. Crawford			

PRINCIPAL DIMENSIONS.

Length between perpendiculars	355 ft.	Breadth Moulded = B _o	48.5 ft.	Depth Moulded to Fbd. deck = D _o	25.5 ft.
Length on Load Line	355 ft.	Thickness of Side plating in ins. x $\frac{3}{12}$ "	+ .14 ft.	Round of Beam	+ 1.0 ft.
		* ($\frac{2}{12}$ if plating is jogged)		Depth from base line to top of inner bottom plating or ordinary floors	26.5 ft.
Length for Freeboard = L	355 ft.	Breadth for Freeboard = B	48.64 ft.	Depth for Tonnage Coef. (Art. 39) = D	23.12 ft.

CORRECTION TO TONNAGE (Art. 39)

Image between top of ceiling on double bottom
or ordinary floors as fitted and standard level of
top of ceiling (v) = **-3.5** tons.

DEPTH OF DOUBLE BOTTOM (Art. 39)

Depth of Actual Double Bottom
(including plating) or Ordinary Floors **40.5** ins.
Depth of Standard Double Bottom
(including plating) or Ordinary Floors **40.46** ins.
Difference **0** = d.
 $\times \frac{1}{12} =$

SHEER (Arts. 39 and 60-63)

Ordinate	Height of Sheer in inches.	S.M.	Products
1 F.P.	60	1	60
2	27.625	4	110.50
3	6.94	2	13.88
4	0.0	4	.0
5	3.81	2	7.62
6	11.56	4	46.24
7	34.56	1	34.56
Sum of Products =			272.80
Height of Sheer = S = $\frac{\text{Sum of Products}}{18}$			15.16 ins.
Standard Mean Height = S _o = $\frac{1}{3}(L/10 + 10)$			15.17 ins.
Difference $\times \frac{1}{12} =$			0 ft. = d ₁
Correction (Arts. 60-63) = $\frac{2}{3}(1 - e)(S_o - S) =$ ins.			

FRAMING (Art. 39)

Between Frames	Length in ft.	Depth of Frame in ins.	Thickness of Sparring in inches	Total depth in inches	Products ft. x inches
0-16	35.5	7	2	9	319.5
16-53	92.5	9	2	11	1017.5
53-84	77.5	10	-	10	775.0
84-110	65.0	10	2	12	780.0
110-F.P.	84.5	9	2	11	929.5
Sum of Products =					3821.5
Sum of Products = Actual Mean Depth of framing					10.76 ins.
Length of Ship					7.50 ins.
Standard " " " "					3.26
Difference $\times \frac{2}{12} =$.54 = 2b

COEFFICIENT OF FINENESS (Art. 39 or 43)

$$\frac{100(V + v)}{L(B - 2b)(D + d + d_1) + n} + n$$
$$\frac{100(2830.4 - 3.5)}{355(48.64 - .54)(23.12 + 0 + 0)} + 0 = .72$$

$$\text{or } \frac{35 \times \Delta}{L \times B_o \times d_o} + 0.04$$
$$= \frac{35 \times 0.25}{355 \times 48.64 \times 23.12} + 0.04 =$$

Sketch showing arrangement and height of double bottom or ordinary floors and of superstructures (unless complete plans are submitted).

4" Ceiling throughout except in E. & B. & Bkts.
Standard depth of double bottom = 42.96
Actual " " " " = 43.50
+ .54 = .05
8676 sq. ft. x .05 = + 4.3
100
No ceiling in E. & B. & Bkts.
77.5 x 40 x .25 = 7.8 tons.
100
Nett correction = -3.5 tons.

Sketch of deck erections showing openings in end bulkheads and position and arrangement of closing appliances. Hatchways, and Engine and Boiler openings also to be shown.
Extent and thickness of wood deck or composition to be shown in red ink, and extent and thickness of ceiling (and battens) on tank top to be given.

No butt
straps.

LONGITUDINAL MODULUS.

DRAUGHT PERMITTED BY LONGITUDINAL STRENGTH (Arts. 81-86) = $\frac{\text{Actual Modulus}}{f, B_0} = \frac{11250}{9.23 \times 48.5} = 25.13$

(2)

Frame = $9 \times 3 \frac{1}{2} \times 3 \frac{1}{2} \times 375$ Ch.

$\frac{L}{Y} = 18.6 \times .91 = \underline{\underline{16.92}}$

32.25 ft.

1.8 with batten holes

88 = 24.88 ft.

H =

t =

Lloyd's Re
Foundation