

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

Received

Index No.

Govt. Copy

Owners C11

Approx (No job parts available)

Ship's Name *Mitsubishi Kagishi 10th Programme Ship for DAIDO KAIUN*

Official Number

Nationality and Port of Registry

Gross Tonnage

Date of Build

Port of Survey

Date of Survey *14-7-54*

Surveyor's Signature *Aheis*

Particulars of Classification *1100 A1*
contemplative

Moulded Dimensions: Length *459.32'* Breadth *63.65'* Depth *40.03'*

Freeboard Length

Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)

Coefficient of fineness for use with Tables *7.5*

DEPTH FOR FREEBOARD (D).

Moulded depth	...	...	...	<i>40.03</i>
Stringer plate	...	...	...	<i>0.07</i>
Wood Sheathing on exposed deck	...	...	...
$T \left(\frac{L-S}{L} \right) =$				

Depth for Freeboard (D) = *40.10*

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D-Table depth) R = *(40.10 - 30.82) 15 + 28.44*

(b) Where D is less than Table depth (if allowed) (Table depth-D) R = *9.48*

If restricted by superstructures

ROUND OF BEAM CORRECTION.

Moulded Breadth (B)	...	...	<i>63.65</i>
Standard Round of Beam = $\frac{B \times 12}{50}$			<i>15.28</i>
Ship's Round of Beam	<i>40.1</i>		<i>15.75</i>
Difference			<i>0.47</i>
Restricted to			
Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right)$			<i>= \frac{0.47}{4} \times 92.82 = 1.1</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed
" overhang
R.Q.D. enclosed
" overhang
Bridge enclosed
" overhang aft
" overhang forward
F'cle enclosed	<i>33.0</i>		<i>7.5</i>		
" overhang
Trunk aft
" forward
Tonnage opening aft
" forward
Total	<i>35</i>

Standard Height of Superstructure *7.5*

" " R.Q.D. *42*

Deduction for complete superstructure *42*

Percentage covered $\frac{S}{L} =$ *3300*

" " $\frac{S_1}{L} =$ *7.18*

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

Percentage from Table, Line A. *3.59*

(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 = *42 x 0.0359 = 1.51*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<i>5.93</i>	1			<i>42</i>		1		
$\frac{1}{8}L$ from A.P.		4					4		
$\frac{2}{8}L$ "		2					2		
Amidships	0	4	0	0	0	0	4	0	0
$\frac{3}{8}L$ from F.P.		2					2		
$\frac{4}{8}L$ "		4					4		
F.P.		1			<i>90"</i>		1		
Total				<i>503.37</i>					<i>396</i>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ *107.37*

If limited on account of midship superstructure.

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 " =

71.41
(.75 - 0.0359) = + *cf. 26*

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.

Depth to Freeboard Deck	=	<i>40.10</i>
Summer freeboard	=	<i>10.64</i>
Moulded draught (d)	=	<i>29.46</i>
Keel allowance	=	
Extreme draught	=	
Deduction for Tropical freeboard and addition for	=	
Winter freeboard = $\frac{d}{4}$ inches =		
Addition for Winter North Atlantic Freeboard (if required) =		

Deduction for Fresh Water.

Displacement in salt water at summer load water line	$\Delta =$
Tons per inch immersion at summer load water line	T =
Deduction = $\frac{\Delta}{40 T}$ inches	=

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.

+	-
<i>1.94 + 29.99</i>	<i>91.93</i>
<i>.75 + 68.1.03</i>	<i>16.67</i>
<i>28.44</i>	<i>15.51</i>
<i>42.6</i>	<i>11</i>
<i>32.701.62 + 21.08</i>	<i>14.754</i>
Summer Freeboard =	<i>27.75</i>

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

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

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.

Length of Fore

Depth of Stair $4.5 \times 3.75 \times 2$
36

33.5

5
33.0

Partial flush deck penalty

4.5932

2.291

6.890×1.0718

$.282 = 1.94$

Denza Draft

29.53 ~~MA~~ ~~San~~
07

29.46

40.10

10.64

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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Foundation