

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received _____
 Index No. _____
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 Owners C11 _____

Ship's Name "STANVAC MEI Foo"	Official Number 172801	Nationality and Port of Registry British Hong Kong.	Gross Tonnage 1165	Date of Build 1945	Port of Survey _____
Moulded Dimensions: Length 213.5' Breadth 37.0' Depth 14.5'					Date of Survey _____
Freeboard Length _____					Surveyor's Signature _____
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 2105 tons					Particulars of Classification B.S.
Coefficient of fineness for use with Tables .757					

DEPTH FOR FREEBOARD (D).

Moulded depth	14.50
Stringer plate	.03
Wood Sheathing on exposed deck	
$T \left(\frac{L-S}{L} \right) =$	
Depth for Freeboard (D) =	14.53

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D-Table depth) R = $(14.53 - 14.23) 1.642 = +4.49$

(b) Where D is less than Table depth (if allowed) (Table depth-D) R = 30

If restricted by superstructures ☒

ROUND OF BEAM CORRECTION.

Moulded Breadth (B)	37.0
Standard Round of Beam = $\frac{B \times 12}{50}$	8.88
Ship's Round of Beam	4.80
Difference	-4.08
Restricted to	
Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{4.08}{4} \times .3372 = +1.34$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>equiv.</i>	47.44	47.44	8.5'		47.44
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
Fore enclosed <i>pk. I</i>	28.75	28.75	6.5'		28.75
" overhang <i>pk. II</i>	45.40	45.40	1.58'	1.58	11.96
Trunk aft		19.90			19.90
" forward					
Tonnage opening aft					
" " forward					
Total	121.59	141.49			108.05

Standard Height of Superstructure	6.0'
" " R.Q.D.	<input checked="" type="checkbox"/>
Deduction for complete superstructure	27.35"
Percentage covered $\frac{S}{L} =$	56.95
" " $\frac{S_1}{L} =$	66.28
" " $\frac{E}{L} =$	50.61
Percentage from Table, Line A. TANKER	41.67
(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 =	$27.35 \times .4167 = -11.40$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	31.35	1		31.35	26.50	26.50	1		26.50
$\frac{1}{2}L$ from A.P.	13.95	4		55.80	10.88	10.88	4		43.52
$\frac{3}{4}L$	3.45	2		6.90	1.88	1.88	2		3.76
Amidships	0	4		0	0	0	4		0
$\frac{3}{4}L$ from F.P.	6.90	2		13.80	5.38	5.38	2		10.76
$\frac{1}{2}L$	27.90	4		111.60	19.38	19.38	4		77.52
F.P.	62.70	1		62.70	41.00	41.00	1		41.00
Total				282.15					203.06

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 " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{79.09}{18} \times \frac{(75-28.48)}{2} = +2.04$
 If limited on account of midship superstructure. ☒ 46.52 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	=	14.53
Summer freeboard	=	1.52
Moulded draught (d)	=	13.01
Keel allowance	=	
Extreme draught	=	
Deduction for Tropical freeboard and addition for	=	

Winter freeboard = $\frac{d}{4}$ inches = $3.25 = 3\frac{1}{4}$ "

Addition for Winter North Atlantic Freeboard (if required) = $3\frac{1}{4}" + 2\frac{1}{4}" = 5\frac{1}{2}"$

Deduction for Fresh Water.

Displacement in salt water at summer load water line	$\Delta = 2246$
Tons per inch immersion at summer load water line	$T = 17.0$
Deduction = $\frac{\Delta}{40 T}$ inches	$= 3\frac{1}{4}"$

TABULAR FREEBOARD corrected for Flash Deck (if required)

Correction for coefficient	$\frac{757+68}{1.36} = 1.437$	$\frac{1.437}{1.36} = 1.057$	25.26
Depth Correction	49		26.69
Deduction for superstructures	11.40		
Sheer correction	2.04		
Round of Beam correction	3.4		
Correction for Thickness of Deck amidships			
Other corrections, scantlings, etc.			
Summer Freeboard =	18.16		

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

Tropical Fresh Water Line above Centre of Disc	6 1/2"
Fresh Water Line	3 1/4"
Tropical Line	3 1/4"
Winter Line below	3 1/4"
Winter North Atlantic Line	5 1/2"

Tropical Fresh Water Freeboard	14 1/4"
Fresh Water	11 3/4"
Tropical	11 3/4"
Winter	11 3/4"
Winter North Atlantic	11 3/4"

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.

Original length of trunk = 129.5'

Length now plated over to
Ship's side = 45.5'

Length of trunk now = 84.0'

" " " In S, & E = $84.0 \times \frac{2.63}{6.00} \times \frac{20.0}{37.0}$
= 19.90'

Forecastle

Part II Length = 45.50'

width correction = $45.50 \times \frac{36.92}{37.0} = \underline{\underline{45.40'}}$

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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