Rpt. C.11 (Comp.).

Index No. ..... (For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
WOODLAND.	182693	BRITISH LEITH.	2759.	

Moulded Dimensions: Length 300·625′ Breadth 46·00′ Depth 23·25′

Moulded displacement at moulded draught = 85 per cent. of moulded depth 5540 tons

Coefficient of fineness for use with Tables ·709

Port of Survey .....

Date ~~of Survey~~ 6·4·49.

Surveyor's Signature .....

Particulars of Classification +100 A1. (contemplated)

DEPTH FOR FREEBOARD (D).

Moulded depth ... ... 23·25

Stringer plate ... ... ·03

Sheathing on exposed deck $T\left(\frac{L-S}{L}\right)$ =

Depth for Freeboard (D) = 23·28

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D—Table depth) R = +7·49″

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

If restricted by superstructures

ROUND OF BEAM CORRECTION.

Moulded Breadth (B)

Standard Round of Beam = $\frac{B \times 12}{50}$ = 11·04

Ship's Round of Beam = 9·00

Difference 2·04

Restricted to

Correction = $\frac{\text{Diff}^{\text{e}}}{4} \times \left(1-\frac{S_1}{L}\right)$ = +·29″

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					
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft ...					
„ „ forward ...					
Total	128·34	127·16			127·16

Standard Height of Superstructure 6·51

„ „ R.Q.D. ✓

Deduction for complete superstructure 35·37

Percentage covered $\frac{S}{L}$ = 42·69

„ „ $\frac{S_1}{L}$ = } 42·30

„ „ $\frac{E}{L}$ = }

Percentage from Table, Line ~~A~~ TIMBER. 64·44

(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 = 35·37 × ·6444 = 22·79″

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
$\frac{1}{6}$L from A.P. ...		4				4	
$\frac{2}{6}$L „ ...		2				2	
Amidships ...		4				4	
$\frac{2}{6}$L from F.P. ...		2				2	
$\frac{1}{6}$L „ ...		4				4	
F.P.		1				1	
Total ...			360·55				364·50

Mean actual sheer aft / Mean standard sheer aft = Excess.

Mean actual sheer forward / Mean standard sheer forward = Excess.

Length of enclosed superstructure / L forward of amidships = >·1L.

„ „ aft of „ = >·1L.

Correction = $\frac{\text{Difference between sums of products}}{18}\left(\cdot 75-\frac{S}{2L}\right)$ = $\frac{3·95}{18}$(·75 − ·2134) = −·12″

If limited on account of midship superstructure. ✓

If limited to maximum allowance of 1½ ins. per 100 ft. ✓

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freebroad.

Ft.

Depth to Freeboard Deck = 28·28

TIMBER Summer freeboard = 2·444

Moulded draught (d) = 20·84

Deduction for ~~T~~TIMBER Tropical freeboard ~~and addition for Winter freeboard~~ = $\frac{d}{4}$ inches = 5·21 = 5¼″

Addition for ~~W~~TIMBER Winter ~~North Atlantic~~ Freeboard ~~(if required)~~ = d/3 = 6·95″ = 7″

Deduction for Fresh Water.

Displacement in salt water at summer load water line

△ =

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\triangle}{40\ T}$ inches = 5¼″

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~ 43·56

Correction for coefficient $\frac{1·389}{1·36}$ 44·49.

	+	−
Depth Correction	7·49	—
Deduction for superstructures	—	22·79
Sheer correction	—	·12
Round of Beam correction	·29	—
Correction for Thickness of Deck amidships ...	—	—
Other corrections, scantlings, etc.	—	—
	7·78	22·91

−15·13

Summer Freeboard = 29·36

AR. 8.4.49

TIMBER **SUMMER FREEBOARD amidships from ~~Centre of Disc to~~ top of Deck Line, ~~Wood~~ Steel, Deck :—**

TIMBER	Tropical Fresh Water Line above	Centre of Disc	... 28″	Tropical Fresh Water Freeboard	2′-5¼″
11.4.49 "	Fresh Water Line	„ „	... 17¾″	Fresh Water „	1′-6¾″
"	Tropical Line	„ „	... 17¾″	Tropical „	2′-0″
"	Winter Line	~~below~~ ABOVE „	... 5½″	Winter „	3′-0¼″
"	Winter North Atlantic Line	BELOW „	... 7″	Winter North Atlantic „	4′-0¾″
"	SUMMER LINE	ABOVE	12½″		

© 2021 Lloyd's Register Foundation