

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>"HAVSTRAND"</b>	Official Number ✓	Nationality and Port of Registry <b>NORWEGIAN BERGEN</b>	Gross Tonnage <b>94</b>	Date of Build <b>1913.</b>	Port of Survey <b>Bergen</b>
Moulded Dimensions: Length <b>30'-0"</b> Breadth <b>18'-9"</b> Depth <b>10'-0 1/2"</b>					Date of Survey <b>25th October 1949</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth ✓ tons					Surveyor's Signature <i>S. A. Eide</i>
Coefficient of fineness for use with Tables <b>1.25 - 68 ✓</b>					Particulars of Classification <b>Contemplated B.C. for carriage light cargoes on Norwegian coast and also for fishing.</b>

<b>DEPTH FOR FREEBOARD (D).</b> 10.04	<b>DEPTH CORRECTION.</b>	<b>ROUND OF BEAM CORRECTION.</b>
Moulded depth ... .. 10.003	(a) Where D is greater than Table depth (D-Table depth) R = $(10.25 - 9.0) \cdot 0.92 = +.87$	Moulded Breadth (B) <b>18'-9"</b>
Stringer plate ... .. ✓	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = $1.25$	Standard Round of Beam = $\frac{B \times 12}{50} = 2.50$
PLANK Sheathing on exposed deck		Ship's Round of Beam = <b>4 3/4"</b>
$T \left( \frac{L-S}{L} \right) =$		Difference <b>.25</b>
Depth for Freeboard (D) = <b>10.211</b>	If restricted by superstructures ✓	Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.25}{2} = -.06$

**DEDUCTION FOR SUPERSTRUCTURES.**

Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ... ..					Standard Height of Superstructure ✓
" overhang ... ..					" " R.Q.D. ✓
R.Q.D. enclosed ... ..					Deduction for complete superstructure ✓
" overhang ... ..					Percentage covered $\frac{S}{L} =$
Bridge enclosed ... ..					" " $\frac{S_1}{L} =$
" overhang aft ... ..					" " $\frac{E}{L} =$
" overhang forward ... ..					Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'cle enclosed ... ..					Percentage from Table, Line B. (corrected for absence of forecastle (if required))
" overhang ... ..					Interpolation for bridge less than .2L (if required)
Trunk aft ... ..					Deduction = ✓
" forward ... ..					
Tonnage opening aft ... ..					
" " forward ... ..					
Total ... ..	✓	✓		✓	

LIGHT DRAUGHT FORWARD 3'-2" SHEER CORRECTION. Sheer measured afloat 8'-11"

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	19.00	1	19.00	21"	21	1	21.00
1/4 L from A.P. ... ..	8.155	4	33.82	5"	5	4	20.00
1/2 L " ... ..	2.09	2	4.18	1"	1	2	2.00
Amidships ... ..	✓	4	✓	0"		4	
3/4 L from F.P. ... ..	4.18	2	8.36	3"	3	2	6.00
1/2 L " ... ..	16.91	4	67.64	7"	7	4	28.00
F.P. ... ..	38.00	1	38.00	22"	22	1	22.00
Total ... ..			171.00				99.00

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - S}{2L} \right) = \frac{72}{18} \times .75 = + 3"$

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 " =

**Deduction for Tropical Freeboard.**  
**Addition for Winter and Winter North Atlantic Freeboard.**

Depth to Freeboard Deck = 10.25 Ft.  
 Summer freeboard = 1.06  
 Moulded draught (d) = 9.19

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 N.L.

Depth Correction ... .. .87 ✓  
 Deduction for superstructures ... .. ✓  
 Sheer correction ... .. 3.00 ✓  
 Round of Beam correction ... .. ✓ .06  
 Correction for Thickness of Deck amidships ... .. ✓  
 Other corrections, scantlings, etc. ... ..

	+	-	
Depth Correction	.87		✓
Deduction for superstructures			✓
Sheer correction	3.00		✓
Round of Beam correction		.06	
Correction for Thickness of Deck amidships			✓
Other corrections, scantlings, etc.			
<b>Summer Freeboard</b>	<b>3.87</b>	<b>.06</b>	<b>3.81</b>

**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.

Trade of ship Norwegian coasting & fishing

Names of sister ships ✓

Builder's name and yard number Unknown

Owners Karsten Daal, Bergen

Fee £ ✓

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Foundation