

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

SEP 28 1938

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
"HULDA MÆRSK"		Danish	ab. 5750	1938	Copenhagen
Moulded Dimensions: Length <i>64w.P.P.</i> 433.00 Breadth 57.5 Depth <i>37'-7 1/2"</i> 37.63/28.63 <i>(28'-7 1/2")</i>					Date of Survey 23rd September 1938
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>(24'-33")</i> = 12528 tons					Surveyor's Signature V. Andersen
Coefficient of fineness for use with Tables .724					Particulars of Classification * 100 A 1 With Freeboard (contemplated)

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... <i>(28'-7 1/2")</i> 28.63	(a) Where D is greater than Table depth (D - Table depth) R =	Moulded Breadth (B) 57.5 <i>(57'-6")</i>
Stringer plate <i>F.H. 0.1...42</i> <i>(0'-0 3/8")</i> 0.05	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 13.8$ <i>(13 3/4")</i>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = \text{none}$	<i>(28.87 - 28.66) 3 = -.63"</i>	Ship's Round of Beam <i>(Superstructure Deck)</i> = 14.20
Depth for Freeboard (D) = <i>(28'-8 3/8")</i> 28.68	If restricted by superstructures	Difference = 1.60
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{1.60^2}{4} \times 0.052 = .032$ <i>NIL</i>
		Round of beam 2nd deck = 12 3/4"

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	32.96	32.96	8.0		32.96	Standard Height of Superstructure 7.5'
" overhang ...	.29	.14			.14	" " R.Q.D. -
R.Q.D. enclosed ...						Deduction for complete superstructure 42"
" overhang ...						Percentage covered $\frac{S}{L} = 100.00$
Bridge enclosed ...						" $\frac{S_1}{L} = 99.48$
" overhang aft ...	395.22	395.22	9.0		395.22	" $\frac{E}{L} = 99.48$
" overhang forward ...						Percentage from Table, Line A. 99.36
Fore enclosed ...	.29	.22			.22	(corrected for absence of forecastle (if required))
Trunk aft ...						Percentage from Table, Line B.
" forward ...	.24					(corrected for absence of forecastle (if required))
Tonnage opening aft ...	4.84	2.23	9.0		2.23	Interpolation for bridge less than 2L (if required)
" forward ...						Deduction = 42" x .9936 = 41.74"
Total ...	433.00	430.77			430.77	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	53.30	1		53.30	53.30	71.88	1		71.88	Mean actual sheer aft = Excess
1/2 L from A.P. ...	23.72	4		94.88	23.28	31.05	4		124.20	Mean actual sheer forward = Excess
3/4 L " ...	5.86	2		11.72	5.76	7.68	2		15.36	Mean standard sheer forward
Amidships ...	-	4		-	0	-	4		-	Length of enclosed superstructure forward of amidships =
3/4 L from F.P. ...	11.72	2		23.44	11.40	13.36	2		26.72	" " aft of " =
1/2 L " ...	47.44	4		189.76	45.48	53.30	4		213.20	
F.P. ...	106.60	1		106.60	104.76	122.76	1		122.76	
Total ...				479.70	+18				574.12	

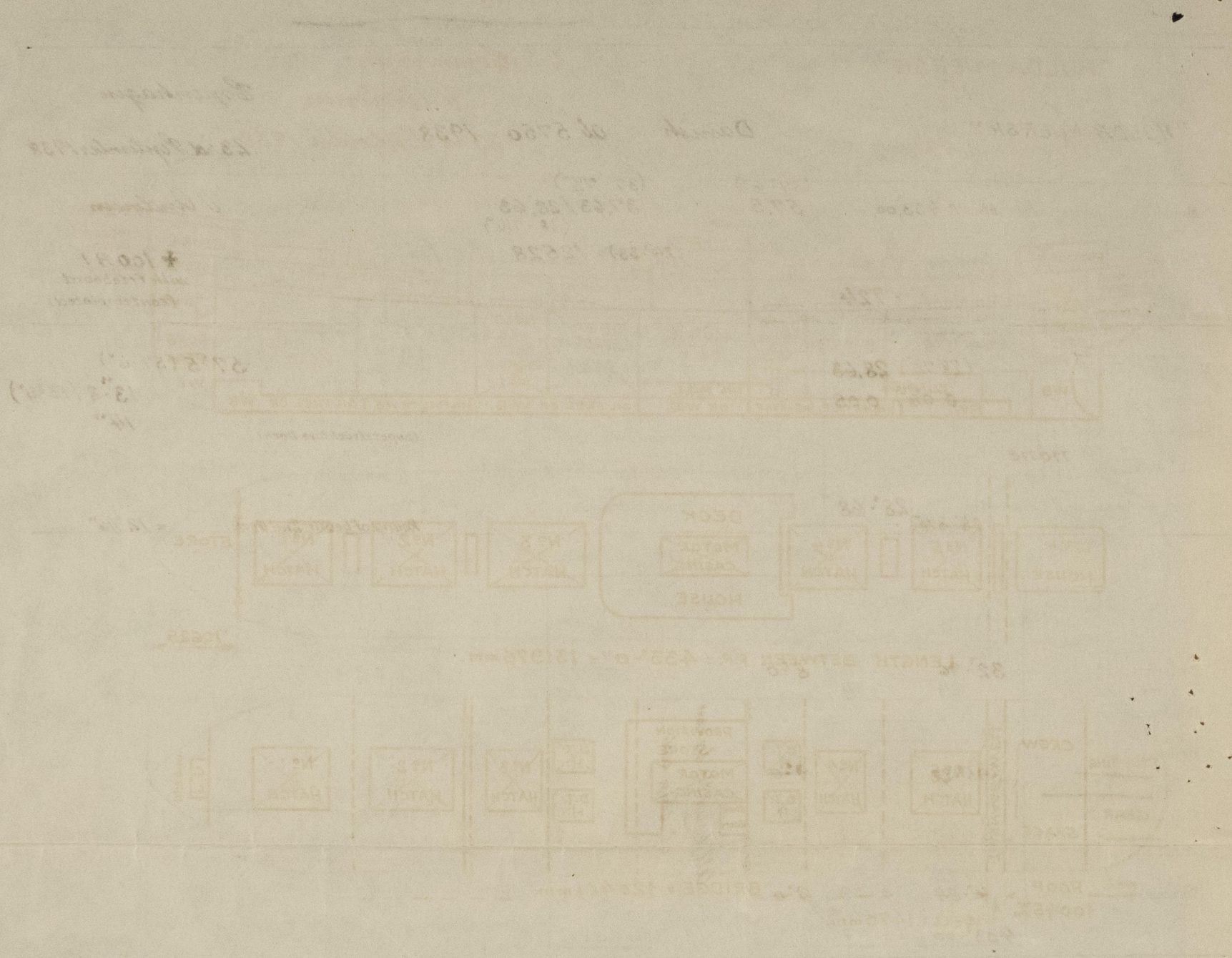
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{94.42}{18} (.75 - .50) = -1.31"$
If limited on account of midship superstructure. If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	81.83
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.724 + .68}{1.36} = \frac{1.404}{1.36}$	84.48
Depth to Freeboard Deck = 28.66	Tons per inch immersion at summer load water line	Depth Correction ...	
Summer freeboard = 3.40	T = 50.9	Deduction for superstructures ...	
Moulded draught (d) = 25.26	Deduction = $\frac{\Delta}{40T}$ inches	Sheer correction ...	
Deduction for Tropical freeboard and addition for	Winter freeboard = $\frac{d}{4}$ inches = 6.32 = 16 1/2"	Round of Beam correction ...	
Addition for Winter North Atlantic Freeboard (if required) =		Correction for Thickness of Deck amidships ...	
		Other corrections, scantlings, etc. ...	
		43.68 - 43.68	
		Summer Freeboard = 40.80	

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

Tropical Fresh Water Line above Centre of Disc ...	325.7	Tropical Fresh Water Freeboard ...	711
Fresh Water Line " " ...	164	Fresh Water " " ...	872
Tropical Line " " ...	164	Tropical " " ...	875
Winter Line below " " ...	164	Winter " " ...	1197
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 ☒

Names of sister ships ☒

Builder's name and yard number Odense Staalskibsværft (ved A. P. Møller) Yard No 75

(Owners) Mgr. A. P. Møller.

Fee £ To be charged with F.E. Rep.



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Foundation