

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name M/s FALSTRIA	Official Number	Nationality and Port of Registry Danish. Copenhagen.	Gross Tonnage	Date of Build	Port of Survey Copenhagen.
M/s Nakskov - Skibsværft. Yard. No. 98					Date of Survey Whilst building
Moulded Dimensions: Length 425.85' Breadth 63.0' Depth 28.0'					Surveyor's Signature V. J. Lydersen.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 12680 tons					Particulars of Classification 100 A.I. with freeb. (Class contemplated).
Coefficient of fineness for use with Tables .696 (.70 Danish Ministerium)					

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 28.00'	(a) Where D is greater than Table depth (D-Table depth) R = ✓	Moulded Breadth (B) 63'
Stringer plate (9.52)03'	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = (28.39 - 28.03) 3 = -.08"	Standard Round of Beam = $\frac{B \times 12}{50} = 15.12"$
Sheathing on exposed deck ✓	If restricted by superstructures No	Ship's Round of Beam = 6.00"
$T \left(\frac{L-S}{L} \right) =$		Difference -9.12"
Depth for Freeboard (D) = 28.03'		Restricted to ✓
		Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{9.12}{4} \times .011 = +.03"$

DEDUCTION FOR SUPERSTRUCTURES.

Actual height = **8.00'** } Diff. = **6"**
7.50'

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	74.06'	74.06'	8'	✓	74.06'
.. overhang ...	0	0			0
R.Q.D. enclosed ...	✓	✓			✓
.. overhang ...	✓	✓			✓
Bridge enclosed ...	229.34'	229.34'	8'	✓	229.34'
.. overhang aft ...	0.85'	0.63'			0.63'
.. overhang forward ...	0.85'	0.43'			0.43'
F'cle enclosed ...	112.49'	112.49'	8'	✓	112.49'
.. overhang ...	0.00'	0.00'			0.00'
Trunk aft ...	✓	✓			✓
.. forward ...	✓	✓			✓
Tonnage opening aft ...	4.13'	4.55'			4.55'
.. forward ...	4.13'				
Total ...	425.85'	421.50'			421.50'

Standard Height of Superstructure	✓
.. R.Q.D.	✓
Deduction for complete superstructure	42.00"
Percentage covered $\frac{S}{L} =$	100%
.. $\frac{S_1}{L} =$	98.932%
.. $\frac{E}{L} =$	98.932%
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	✓
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	98.69%
Interpolation for bridge less than 2L (if required)	✓
Deduction =	.9869 x 42 = -41.45"

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	52.59"	1	52.59	54.34"	60.34"	1	60.34		
$\frac{1}{8}$ L from A.P. ...	23.40"	4	93.60	24.15"	26.81"	4	107.24		
$\frac{3}{8}$ L ..	5.78"	2	11.56	6.06"	6.73"	2	13.46		
Amidships ...	0	4	0	0	0	4	0		
$\frac{3}{8}$ L from F.P. ...	11.57"	2	23.14	11.88"	12.59"	2	25.18		
$\frac{1}{8}$ L ..	46.80"	4	187.20	47.63"	50.49"	4	201.96		
F.P. ...	105.17"	1	105.17	107.10"	113.10"	1	113.10		
Total ...			473.26				521.28		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{48.02}{18} \times .25 = -.67"$

If limited on account of midship superstructure.

Mean actual sheer aft =	Excess
Mean standard sheer aft	
Mean actual sheer forward =	Excess.
Mean standard sheer forward	
Length of enclosed superstructure forward of amidships =	C.S.S.
.. aft of ..	C.S.S.

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

Depth to Freeboard Deck = **28.03'**
Summer freeboard = **3.10'**
Moulded draught (d) = **24.93'**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **6.23" ~ 158 mm.**
Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta = 13360$
Tons per inch immersion at summer load water line
 $T = 48.8$

Deduction = $\frac{\Delta}{40T}$ inches
= 6.84" ~ 174 mm.

TABULAR FREEBOARD corrected for Flush Deck (if required)
Correction for coefficient $\frac{.696+.68}{1.36} = \frac{1.375}{1.36}$

Depth Correction	✓	1.08"
Deduction for superstructures	✓	41.45"
Sheer correction	✓	.67"
Round of Beam correction	✓	.03"
Correction for Thickness of Deck amidships	✓	
Other corrections, scantlings, etc.	✓	

Summer Freeboard = **37.24' ~ 946 mm**

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

Freeboards as assigned by Danish Authorities

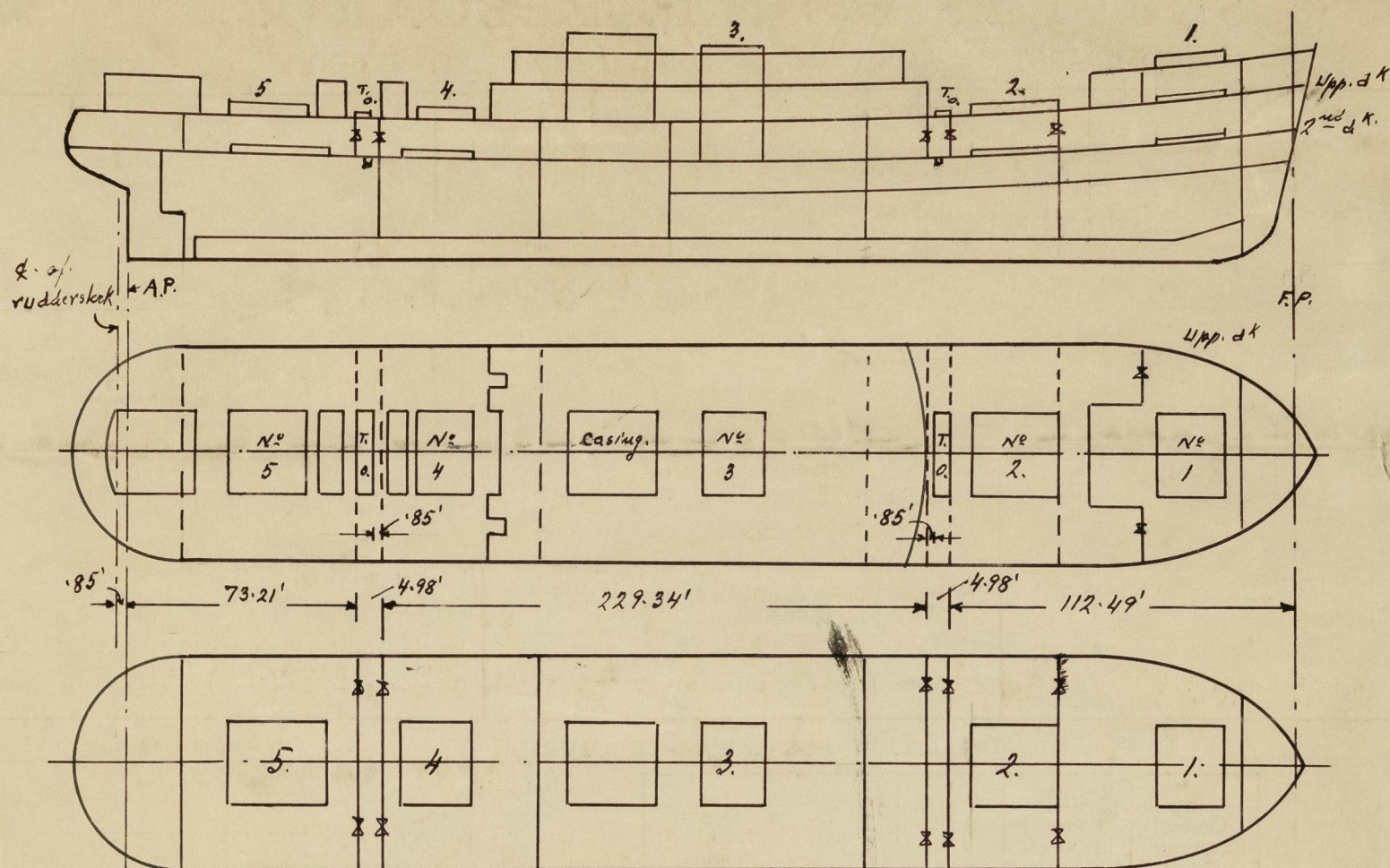
Tropical Fresh Water Line above Centre of Disc	320 mms
Fresh Water Line	160 "
Tropical Line	160 "
Winter Line below	160 "
Winter North Atlantic Line	

Tropical Fresh Water Freeboard	635 "
Fresh Water	795 "
Tropical	795 "
Winter	1115 "
Winter North Atlantic	

Lloyd's Register Foundation

004394-004407-0238

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.



Tween deck bulkheads.								
Bhd.	Plat.	Stiff.	Spacing.	End of stiff attachment.	Opening	Bill.	Ht. of bulkhead.	Closing app.
Forw. Forw. bhd.	26"	* 120x75x8	30"	Takes bound. bars.	5'4 1/2 x 3'3" p.s.	23 5/8	8'	Wood. boards. for full height in riveted channels. (p.s.)
Well. Aft. bhd.	26"	* 120x75x8	30"	"	5'4 1/2 x 3'3" p.s.	23 5/8	8'	— " — (u)
Aft. Forw. bhd.	26"	* 120x75x8	30"	"	5'4 1/2 x 3'3" p.s.	23 5/8	8'	— " — (u)
Well. Aft. bhd.	26"	* 120x75x8	30"	"	5'4 1/2 x 3'3" p.s.	23 5/8	8'	— " — (u)

Closing appliances of the centerline openings in bhd. in the forward well. - Hinged steel doors.

One 5" scupper fitted p. & st. in tonnage well. - Can be controlled from Upper deck.

This vessel carries a passenger certificate. The flooding calculations will, as stated by the Danish Authorities, allow a max. moulded summer draught of 7610 mm (24'-11 9/16").

The freeboard certificate will be issued by the Danish Authorities.

Trade of ship

Denmark - Bangkok.

Names of sister ships

Builder's name and yard number

A/S Nakskov Skibsverft.

No 98.

Owners

Det. Østasiatiske Kompagni.

Copenhagen.

Fee £ No. fee.



© 2020

Lloyd's Register Foundation