

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name FELIPES	Official Number	Nationality and Port of Registry Dutch	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 96.393 m Breadth 14.021 m Depth 5.334 m					Date of Survey 24/1/50
Moulded displacement at moulded draught = 85 per cent. of moulded depth 4736.6 metric tons					Surveyor's Signature [Signature]
Coefficient of fineness for use with Tables 754					Particulars of Classification

DEPTH FOR FREEBOARD (D). Moulded depth ... 5.334 Stringer plate ... 012 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 5.346	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = (b) Where D is less than Table depth (if allowed) (Table depth-D) R = 8.33(6.426-5.346) 24.342 = -219 mm 1.080 If restricted by superstructures	ROUND OF BEAM CORRECTION. Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = Difference standard Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) =$ Nil
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S) m	Equivalent Enclosed Length (S ₁) m	Height	Height Correction	Effective Length (E)
Poop enclosed ...	28.423	28.423	2.134	✓	28.423
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
F'ole enclosed ...	11.582	11.582	2.134		11.582
„ overhang ...					
Trunk aft ...					
„ forward ...		35.847			
Tonnage opening aft ...					
„ „ forward ...					
Total ...	40.005	75.852			75.852

Standard Height of Superstructure **2.033 m**
„ „ R.Q.D. ✓
Deduction for complete superstructure **925 mm**
Percentage covered $\frac{S}{L} =$ **41.50**
„ „ $\frac{S_1}{L} =$ } **78.68**
„ „ $\frac{E}{L} =$ }
Percentage from Table, Line A. + B **73.68**
(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 = **925 × 73.68 = 682 mm** ✓

Actual sheers not exceeding standard **SHEER CORRECTION.**

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	1057	1			914	914	1		914
$\frac{1}{2}$ L from A.P. ...	470	4			451	451	4		1804
$\frac{1}{4}$ L „ ...	117	2			137	137	2		274
Amidships ...		4			-	-	4		-
$\frac{1}{4}$ L from F.P. ...	235	2			235	235	2		470
$\frac{1}{2}$ L „ ...	939	4			965	939	4		3756
F.P. ...	2114	1			2144	2114	1		2114
Total ...				9511					9332

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{179(75 - 2075)}{18 \times 5425} = + 5 \text{ mm}$
If limited on account of midship superstructure.

Mean actual sheer aft **< standard**
Mean standard sheer aft =
Mean actual sheer forward **standard**
Mean standard sheer forward =
Length of enclosed superstructure forward of amidships =
L
„ „ aft of „ =
If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 5.346 Summer freeboard = 374 16.31' Moulded draught (d) = 4.972 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 $\frac{1.434}{1.36}$ Depth Correction ... 219 Deduction for superstructures ... 682 Sheer correction ... 51 Round of Beam correction ... Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. ... 5 901 - 896 Summer Freeboard = 374
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Water~~, 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 „ „ ...