

Ambrte (Monte)
32470
Carry (Monte)
33713

Rpt. G-11.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index No. 33778
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Port of Survey Dunkirk

MONTE ABRIL (Type of Superstructures.)

Date of Survey 21/23 February 1932.

Ship's Name <u>Artza-Mendi</u>	Nationality and Port of Registry <u>Spanish Bilbao</u>	Official Number	Gross Tonnage <u>2955</u>	Date of Build <u>1930-7</u>
-----------------------------------	---	-----------------	------------------------------	--------------------------------

Name of Surveyor O. Dechmann.

Moulded Dimensions: Length 102.11 Breadth 13.87 Depth 6.096
Moulded displacement at moulded draught = 85 per cent. of moulded depth
Coefficient of fineness for use with Tables .73 (estimated) tons

Particulars of Classification +100 RL with funnels.

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	6.096	(a) Where D is greater than Table depth (D - Table depth) R =	✓	Moulded Breadth (B)	13.87
Stringer plate	8	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	$8.33(6.808 - 6.104) \times 25.79 = -151\%$	Standard Round of Beam = $\frac{B \times 12}{50} = 277\%$	
Sheathing on exposed deck	✓	If restricted by superstructures		Ship's Round of Beam	279
$T \left(\frac{L-S}{L} \right) =$				Difference	2
Depth for Freeboard (D) =	<u>6.104</u>			Restricted to	-
				Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{2^2}{4} \times .006 = .006$	

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	9.99	9.99	2.44	-	9.99
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed					
„ overhang aft	90.90	90.90	2.44	-	90.90
„ overhang forward					
„ enclosed					
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft	1.22	.61 = 1/2 of 1.22			.61
„ forward					
Total	102.11	101.50			101.50

Standard Height of Superstructure 2.09
„ „ R.Q.D. ✓
Deduction for complete superstructure 957
Percentage covered $\frac{S}{L} = 100.0$
„ „ $\frac{S_1}{L} = 99.4$
„ „ $\frac{E}{L} = 99.4$
Percentage from Table, Line A. ✓ 99.26
(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 = $957 \times .9926 = -950\%$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	1104	1	1104	1219	1569	1104	1	1104	
1/4 L from A.P.	491	4	1964	532	698	491	4	1964	
1/2 L	122.5	2	245	133	173	122.5	2	245	
Amidships	-	4	-	-	-	-	4	-	
3/4 L from F.P.	245	2	490	196	240	240	2	480	
1/4 L	982	4	3928	782	970	970	4	3880	
F.P.	2209	1	2209	1829	2179	2179	1	2179	
Total			9940	+350	2179	2179		9852	

Mean actual sheer aft = Excess.
Mean standard sheer aft

Mean actual sheer forward = Deficient.
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = } C.S.S.
„ „ aft of „ = }

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{88}{18} (.75 - .50) = +1\%$

If limited on account of midship superstructure. ✓

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

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

Depth to Freeboard Deck = 6.104
Summer freeboard = .277
Moulded draught (d) = 5.827

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 = $\frac{\Delta}{40T}$ inches
121

TABULAR FREEBOARD corrected for Flash Deck (if required)

Correction for coefficient	$\frac{.73 + .68}{1.30} = \frac{1.41}{1.36}$	1328
		1377
Depth Correction	-	151
Deduction for superstructures	-	950
Sheer correction	1	-
Round of Beam correction	-	-
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	1	1101

Summer Freeboard = 277

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

Tropical Fresh Water Line above Centre of Disc	242 = 9.52	Tropical Fresh Water Freeboard	35 = 1.39
Fresh Water Line	121 = 4.76	Fresh Water	156 = 6.15
Tropical Line	121 = 4.76	Tropical	156 = 6.15
Winter Line below	121 = 4.76	Winter	398 = 15.67
Winter North Atlantic Line		Winter North Atlantic	

2 - MAR 1937

004107-004115-0038

RECEIVED

MARKING FOR 18 MAY 1937