

Amended.
Preliminary

For LONDON OFFICE ONLY

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received

Index No.

Govt. Copy

Owners C11

Ship's Name <i>Askaniya de Cadiz</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
<i>47 + 48</i>					<i>8 May 56</i>
Moulded Dimensions: Length <i>161.540</i> Breadth <i>21.640</i> Depth <i>11.925</i>					Surveyor's Signature
Freeboard Length <i>161.540</i>					Particulars of Classification <i>+100 A1</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>29050</i> metric tons (excluding bossing)					<i>comp. potassium in bulk.</i>
Coefficient of fineness for use with Tables <i>.800</i>					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth <i>11.925</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>8.33 (11949-10770) 30 = +294</i>	Moulded Breadth (B) <i>21640</i>
Stringer plate <i>23</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <i>1179</i>	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{21640}{50} = 433$
Wood Sheathing on exposed deck	If restricted by superstructures	Ship's Round of Beam = <i>435</i>
$T \left(\frac{L-S}{L} \right) =$		Difference <i>2</i>
Depth for Freeboard (D) = <i>11949</i>		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{2}{4} (1 - .5787) =$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>Equip.</i>	<i>33155</i>	<i>33155</i>	<i>2360</i>		<i>33155</i>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed <i>Equip.</i>	<i>13910</i>	<i>13910</i>	<i>2360</i>		<i>13910</i>
" overhang aft					
" overhang forward					
F'cle enclosed	<i>20990</i>	<i>20990</i>	<i>2360</i>		<i>20990</i>
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	<i>68055</i>	<i>68055</i>			<i>68055</i>

Standard Height of Superstructure *2290*

" " R.Q.D.

Deduction for complete superstructure *1067*

Percentage covered $\frac{S}{L} =$ *42.13*

" " $\frac{S_1}{L} =$ "

" " $\frac{E}{L} =$ "

Percentage from Table, Line A *Tankers* = *33.13*

(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 = *1067* × *33.13* = *3543*

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	<i>1600</i>	<i>1</i>	<i>1600</i>	<i>1603</i>	<i>1673</i>	<i>1</i>	<i>1673</i>
$\frac{1}{4}$ L from A.P.	<i>711</i>	<i>4</i>	<i>2944</i>	<i>200</i>	<i>202</i>	<i>4</i>	<i>808</i>
$\frac{2}{4}$ L "	<i>178</i>	<i>2</i>	<i>356</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>0</i>
Amidships	<i>0</i>	<i>4</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>4</i>	<i>0</i>
$\frac{3}{4}$ L from F.P.	<i>356</i>	<i>2</i>	<i>712</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>0</i>
$\frac{1}{4}$ L "	<i>1422</i>	<i>4</i>	<i>5688</i>	<i>545</i>	<i>545</i>	<i>4</i>	<i>2180</i>
F.P.	<i>3200</i>	<i>1</i>	<i>3200</i>	<i>2905</i>	<i>2905</i>	<i>1</i>	<i>2905</i>
Total			<i>14450</i>				<i>7466</i>

Mean actual sheer aft = *Depart*

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

L

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{(6934)}{18} (.75 - .2107) = 207$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *11949* Ft.

Summer freeboard = *2758*

Moulded draught (d) = *9193*

Keel allowance =

Extreme draught =

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

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

+	-
<i>294</i>	<i>3</i>
<i>8</i>	<i>354</i>
<i>207</i>	
<i>2</i>	<i>3</i>
<i>501</i>	<i>354</i>

Summer Freeboard = *2755*

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.

$$\text{Ridgely - length} = (12480 + \frac{2}{3} \times 2750) \frac{21030}{21640} = 13910 \text{ (Equiv)}$$

After shear

$$\begin{aligned} \text{Prop length of Ldb} &= 31.855 \\ \frac{1}{6} &= 161.54 \frac{1}{6} \\ &= \frac{26.923}{4.932} \end{aligned}$$

$$\text{Prop length excess over standard} = (2361 - 2290) = 70$$

$$\text{Allowed shear at AP} = (1603 + 70) = 1673$$

$$\text{Allowed shear at } \frac{1}{6}L = 200 + \frac{70 \times 4.932}{31.855} = 200 + 12 = 212$$

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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