Rpt. C.11 (Comp.).

Index No. *41897*
(For London Office only.)

# Lloyd's Register of Shipping.
## SURVEYS FOR FREEBOARD.
### (COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

| Ship's Name | Official Number | Nationality and Port of Registry | Gross Tonnage | Date of Build |
|---|---|---|---|---|
| GEMMA | | DUTCH | | |

Port of Survey ___

Date of Survey ___ 11.9.50

Surveyor's Signature ___

Moulded Dimensions: Length *383.00'* Breadth *62.50"* Depth *26.25'*
*To centre of Keddel Stock*

Moulded displacement at moulded draught = 85 per cent. of moulded depth ___ tons

Particulars of Classification ___

Coefficient of fineness for use with Tables *.836 (Calculated)*

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### DEPTH FOR FREEBOARD (D).

Moulded depth ... ... *26.25*

Stringer plate ... *.64* ... *.05*

Sheathing on exposed deck

$T\left(\dfrac{L-S}{L}\right) =$

Depth for Freeboard (D) = *26.30*

### DEPTH CORRECTION.

(a) Where D is greater than Table depth
(D—Table depth) R =
$(26.30 - 25.53)\dfrac{2.946}{.77} = +2.27"$

(b) Where D is less than Table depth (if allowed)
(Table depth—D) R =

If restricted by superstructures

### ROUND OF BEAM CORRECTION.

Moulded Breadth (B) *62.50'*

Standard Round of Beam = $\dfrac{B \times 12}{50}$ = *15.00"*

Ship's Round of Beam = *16.00"*

Difference *+1.00*

Restricted to

Correction = $\dfrac{\text{Diff}^e}{4} \times \left(1 - \dfrac{S_1}{L}\right)$ = $\dfrac{1}{4} \times .8377$ = −.21"

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### DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S₁) | Height | Height Correction | Effective Length (E) |
|---|---|---|---|---|---|
| Poop enclosed ... ... | 62.16 | 62.16 | 825 | ✓ | 62.16 |
| „ overhang ... | | | | | |
| R.Q.D. enclosed ... ... | | | | | |
| „ overhang ... | | | | | |
| Bridge enclosed ... | | | | | |
| „ overhang aft ... | | | | | |
| „ overhang forward ... | | | | | |
| F'cle enclosed ... | | | | | |
| „ overhang ... | | | | | |
| Trunk aft ... ... | | | | | |
| „ forward ... | | | | | |
| Tonnage opening aft ... | | | | | |
| „ „ forward... | | | | | |
| Total ... ... | 62.16 | 62.16 | | | 62.16 |

Standard Height of Superstructure ... *7.33*

„ „ R.Q.D. ✓

Deduction for complete superstructure *40.87*

Percentage covered $\dfrac{S}{L}$ =

„ „ $\dfrac{S_1}{L}$ } *16.23*

„ „ $\dfrac{E}{L}$

Percentage from Table, Line A. *8.12*
(corrected for absence of forecastle (if required)) *3.12*

Percentage from Table, Line B. ✓
(corrected for absence of forecastle (if required)) ✓

Interpolation for bridge less than .2L (if required)

Deduction = *40.87 × .0312 = 1.28*

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### SHEER CORRECTION.

| Station | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
|---|---|---|---|---|---|---|---|
| A.P. ... ... | 48.30 | 1 | | | | 1 | |
| ⅙L from A.P. ... | | 4 | | | | 4 | |
| 2/6 L „ | | 2 | | | | 2 | |
| Amidships ... | | 4 | | | | 4 | |
| 2/6 L from F.P. ... | | 2 | | | | 2 | |
| ⅙L „ | | 4 | | | | 4 | |
| F.P. ... ... | 96.60 | 1 | | | | 1 | |
| Total ... | | | 434.71 | | | | 96.50 |

$\dfrac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}} =$ } Deficient ✓

$\dfrac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}} =$ }

$\dfrac{\text{Length of enclosed superstructure}}{L}$ forward of amidships = } Deficient ✓

„ „ aft of „ = } Sheers.

Correction = $\dfrac{\text{Difference between sums of products}}{18}\left(.75 - \dfrac{S}{2L}\right)$ = $\dfrac{338.21}{18}(.75 - .0811)$ = $+12.57"$
.6689 If limited to maximum allowance of 1½ ins. per 100 ft. ✓

If limited on account of midship superstructure.

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

| | Ft. |
|---|---|
| Depth to Freeboard Deck | 26.30 |
| Summer freeboard | 7.27 |
| Moulded draught (d) | 19.03 |

Deduction for Tropical freeboard and addition for Winter freeboard = $\dfrac{d}{4}$ 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 = $\dfrac{\Delta}{40\,T}$ inches

### TABULAR FREEBOARD corrected for Flush Deck (if required) *66.30*

Correction for coefficient $\dfrac{.836 + .68}{1.36} = \dfrac{1.516}{1.36}$ = *73.90*

| | + | − |
|---|---|---|
| Depth Correction | 2.27 | 1.28 |
| Deduction for superstructures ... | | |
| Sheer correction ... ... | 12.57 | .21 |
| Round of Beam correction ... | | |
| Correction for Thickness of Deck amidships ... | | |
| Other corrections, scantlings, etc. ... ... | | |
| | 14.84 | 1.49 +13.35 |

Summer Freeboard = *87.25*

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

*7' 3¼"*

| | | | | | | |
|---|---|---|---|---|---|---|
| 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 „ „ | | |

2m.9.49. T.