

S.V. with C.S.S.

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Bengkalis</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey.....
Moulded Dimensions: Length <i>420</i> Breadth <i>54.5</i> Depth <i>28</i>					Date of Survey.....
Moulded displacement at moulded draught = 85 per cent. of moulded depth.....tons					Surveyor's Signature.....
Coefficient of fineness for use with Tables <i>.752</i>					Particulars of Classification.....

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... .. <i>28.0</i> Stringer plate ... .. <i>.04</i> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>28.04</i>	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D-Table depth) R = <i>(28.04 - 28) 3 + .12 = .04</i> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = Difference Restricted to Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <i>std</i>
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<b>DEDUCTION FOR SUPERSTRUCTURES.</b>					Standard Height of Superstructure <i>7.5</i>	
Poop enclosed ... ..	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	" " R.Q.D. ....
" overhang ... ..						Deduction for complete superstructure <i>42</i>
R.Q.D. enclosed ... ..						Percentage covered $\frac{S}{L} =$
" overhang ... ..						" " $\frac{S_1}{L} =$ } <i>100</i>
Bridge enclosed ... ..						" " $\frac{E}{L} =$
" overhang aft ... ..						Percentage from Table, Line A.
" overhang forward ... ..						(corrected for absence of forecastle (if required))
F'cle enclosed ... ..						Percentage from Table, Line B.
" overhang ... ..						(corrected for absence of forecastle (if required))
Trunk aft ... ..						Interpolation for bridge less than .2L (if required)
" forward ... ..						Deduction = <i>42</i>
Tonnage opening aft ... ..						
" " forward ... ..						
Total ... ..						

<b>SHEER CORRECTION.</b>								<i>LR Standard Substructure 8.00</i>
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product	<i>LL " " 7.50</i>
A.P. ... ..		1				1		
$\frac{1}{4}L$ from A.P. ... ..		4				4		
$\frac{3}{4}L$ " ... ..		2				2		
Amidships ... ..		4				4		
$\frac{3}{4}L$ from F.P. ... ..		2				2		
$\frac{1}{4}L$ " ... ..		4				4		
F.P. ... ..		1				1		
Total ... ..								
Correction = $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) =$								<i>50</i>
If limited on account of midship superstructure.								If limited to maximum allowance of 1½ ins. per 100 ft.

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Ft. Depth to Freeboard Deck = <i>28.04</i> Summer freeboard = <i>3.29</i> Moulded draught (d) = <i>24.75</i> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{40 T}$ inches =	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient $\frac{.752 + .68}{1.36} = \frac{1.432}{1.36}$ Depth Correction ... .. Deduction for superstructures ... .. Sheer correction ... .. Round of Beam correction ... .. Correction for Thickness of Deck amidships ... .. Other corrections, scantlings, etc. ... .. Summer Freeboard = <i>39.54</i>
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<b>SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-</b>			
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.

417-9

22x7

189

15'-9"

7-170 x28

380-4

9x26 236

19-6

415-7

2-2

165

28

326

1304

12/4564  
380-4

10'-4"

10'-1"

419-5

Trade of ship .....

Names of sister ships .....

Builder's name and yard number .....

Owners .....

Fee £.....:.....



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