

# LLOYD'S REGISTER OF SHIPPING

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## SURVEYS FOR FREEBOARD

(COMPUTATION FOR ~~STEAMER, SAILING SHIP, TANKER~~)

Received

Index No.

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Owners CII

GREENOCK F&amp;B REP. N° 25072

Ship's Name <b>MT. DAVANGER</b> (LITHGOWS N° 1079)	Official Number ✓	Nationality and Port of Registry <b>NORWEGIAN</b> <b>BERGEN</b>	Gross Tonnage <b>APPROX</b> <b>11950</b>	Date of Build <b>1953/4</b>	Port of Survey <b>GREENOCK</b>
Moulded Dimensions: Length <b>510.0</b> Breadth <b>72.0</b> Depth <b>37.0</b> ✓ Freeboard Length <b>510.0</b> ✓ Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>24963</b> tons (excluding bossing) Coefficient of fineness for use with Tables <b>.757</b> ✓					Date of Survey <b>DURING CONSTRUCTION</b> Surveyor's Signature <i>Ap... ..</i> Particulars of Classification <b>100AT</b> <b>CARRYING PETROLEUM IN BULK</b> <b>(CONTINGENT)</b>

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth ...	<b>37.0</b>	(a) Where D is greater than Table depth (D-Table depth) R = $(37.07 - 34.00) \times 3$ <b>= 9.21</b>		Moulded Breadth (B)	<b>72.0</b>
Stringer plate ...	<b>.89</b>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓		Standard Round of Beam = $\frac{B \times 12}{50}$	<b>17.28</b>
Wood Sheathing on exposed deck	<b>NIL</b>			Ship's Round of Beam	<b>18.0</b>
T $\left(\frac{L-S}{L}\right) =$		If restricted by superstructures ✓		Difference	<b>.72</b>
Depth for Freeboard (D) =	<b>37.07</b>			Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right)$	<b>.72 / 4 (.5657) = .10</b>

DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
✓ BRIDGE SET INBOARD 12"	<b>123.00</b>	<b>123.00</b>	<b>8.5</b>		<b>123.00</b>
Poop enclosed	<b>114.0</b>	<b>114.0</b>			
" overhang	<b>NIL</b>				
R.Q.D. enclosed	<b>46.99</b>	<b>46.99</b>			<b>46.99</b>
" overhang	<b>50.33</b>	<b>50.33</b>	<b>7.75</b>		
✓ Bridge enclosed	<b>44.33</b>	<b>44.33</b>			
" overhang aft	<b>NIL</b>				
" overhang forward	<b>NIL</b>				
F'cle enclosed	<b>51.50</b>	<b>51.50</b>	<b>7.75</b>		<b>51.50</b>
" overhang	<b>NIL</b>				
Trunk aft	<b>---</b>				
" forward	<b>---</b>				
Tonnage opening aft	<b>---</b>				
" forward	<b>---</b>				
Total	<b>221.49</b>	<b>221.49</b>			<b>221.49</b>

Standard Height of Superstructure **7.50** ✓  
 " " R.Q.D. ✓  
 Deduction for complete superstructure **42.00** ✓  
 Percentage covered  $\frac{S}{L} =$   
 "  $\frac{S_1}{L} =$  **43.43** ✓  
 "  $\frac{E}{L} =$   
 Percentage from Table, Line A. **TANKER 34.43** ✓  
 (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 = **42.00 x .3443 = -14.46** ✓

SHEER CORRECTION.							
Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...	<b>61.00</b>	<b>1</b>	<b>61.00</b>	<b>61.0</b>	<b>61.00</b>	<b>1</b>	<b>61.00</b>
1/4 L from A.P. ...	<b>27.145</b>	<b>4</b>	<b>108.58</b>	<b>27.125</b>	<b>27.125</b>	<b>4</b>	<b>108.50</b>
1/2 L " ...	<b>6.71</b>	<b>2</b>	<b>13.42</b>	<b>6.75</b>	<b>6.75</b>	<b>2</b>	<b>13.50</b>
Amidships ...	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>
3/4 L from F.P. ...	<b>13.42</b>	<b>2</b>	<b>26.84</b>	<b>13.50</b>	<b>13.50</b>	<b>2</b>	<b>27.00</b>
1/4 L " ...	<b>54.29</b>	<b>4</b>	<b>217.16</b>	<b>54.25</b>	<b>54.25</b>	<b>4</b>	<b>217.00</b>
F.P. ...	<b>122.00</b>	<b>1</b>	<b>122.00</b>	<b>122.0</b>	<b>122.00</b>	<b>1</b>	<b>122.00</b>
Total			<b>549.00</b>				<b>549.00</b>

Mean actual sheer aft =  
 Mean standard sheer aft =  
 Mean actual sheer forward =  
 Mean standard sheer forward =  
 Length of enclosed superstructure forward of amidships =  
 " " aft of " =  
 = **NIL** ✓  
 If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

Deduction for Tropical Freeboard.		Deduction for Fresh Water.		TABULAR FREEBOARD corrected for Flush Deck (if required)	
Addition for Winter and Winter North Atlantic Freeboard.		Displacement in salt water at summer load water line		Correction for coefficient	
Depth to Freeboard Deck =	<b>37.07</b>	$\Delta = \frac{30' - 23774}{29' - 22884}$		Depth Correction	<b>9.21</b>
Summer freeboard =	<b>8.06</b>	Tons per inch immersion at summer load water line		Deduction for superstructures	<b>-14.46</b>
Moulded draught (d) =	<b>29.01</b>	T' = $\frac{30' - 74.17}{29' - 73.58}$		Sheer correction	<b>-1.0</b>
Keel allowance =		Deduction = $\frac{40 T}{12}$ inches		Round of Beam correction	<b>-</b>
Extreme draught =				Correction for Thickness of Deck amidships	<b>-</b>
Deduction for Tropical freeboard and addition for =				Other corrections, scantlings, etc. To correspond with a SUMMER MOULDED DRAUGHT of 29'0" (ACTUAL 29'0" / 8)	<b>7.22</b>
Winter freeboard = $\frac{d}{4}$ inches =	<b>7.25</b>			Summer Freeboard =	<b>96.75</b>
Addition for Winter North Atlantic Freeboard (if required) =	<b>7.25 + 5.10 = 12.35</b>				

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

Tropical Fresh Water Line above Centre of Disc	(391 " ) 15"
Fresh Water Line	(197 " ) 7 3/4"
Tropical Line	(184 " ) 7 1/4"
Winter Line	(184 " ) 7 1/4"
Winter North Atlantic Line	(311 " ) 12 1/4"

Tropical Fresh Water Freeboard	(2457 " ) 8' 0 3/4"
Fresh Water	(2076 " ) 6' 9 3/4"
Tropical	(2260 " ) 7' 5"
Winter	(2273 " ) 7' 5 1/2"
Winter North Atlantic	(2641 " ) 8' 8"
	(2768 " ) 9' 2"



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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.

POOP.  
Length at Side = 119.00 ✓  
+  $\frac{2}{3} \times 6.0$  = 4.00 ✓  
123.00' ✓

BRIDGE  
Length at Side = 44.33 ✓  
+  $\frac{2}{3} \times 6.00$  = 4.00 ✓  
48.33' ✓  
Equivl. Length:  $48.33 \times \frac{70.0}{72.0}$   
= 46.99 ✓

Trade of ship INTERNATIONAL

Names of sister ships —

Builder's name and yard number LITHGOWS L<sup>D</sup> NR 1079

Owners WESTFAL LARSEN & C. A/S.

APPROX

Fee £ 50 : 0 : 0

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

MIDSHIP SECTION

PROFILE & DECKS.



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