

Freeboard D.

## Lloyd's Register of British and Foreign Shipping.

FORM OF COMPARISON OF SCANTLINGS OF UNCLASSED IRON AND STEEL SHIPS  
WITH THE RULES OF LLOYD'S REGISTER. **THUR. 25 FEB 1909**

**IRON OR STEEL** *Screw Steamer*  
 Survey held at *Grangemouth*  
 On the *S. "Netravati" Yard 8-310*  
 ONE, OR TWO, DECKED, THREE DECKED VESSEL,  
 SPAN, OR AWNING DECKED VESSEL.

Port of *Leith*  
 Date, *24 February 1909*

Feet.  
 Half Breadth (moulded) .. .. . *18.0*  
 Depth from upper part of Keel to top of *Upper* Dk. Beams *15.83 73.75*  
 Girth of Half Midship Frame (as per Rule) .. .. . *31.09 38.5*  
 1st Number .. .. . *64 92 79.75*  
 1st Number, if a 3-Decked Vessel deduct 7 ft. *✓*  
 Length .. .. . *244.66*  
 2nd Number .. .. . *15883 19511*  
 Proportions—Breadths to Length .. .. . *6.79*  
 Depths to Length—Upper Deck to Keel .. .. . *10.52*  
 Main Deck ditto .. .. . *15.45*

Built at *Grangemouth*  
 When built *1909* Off. No. ....  
 By whom built *The Greenock & Grangemouth Dockyard Co. Ltd.*  
 Owners *Messrs. Bombay Steam Navigation Co.*  
 Port belonging to *Bombay*

COMPARISON OF THE SCANTLINGS:—To be made with the Rules of Lloyd's Register.

FRAMING.			Inches in Ship	Inches in Ship	20ths in Ship	Inches per Rule	Inches per Rule	16ths or 20ths per Rule
FRAME, Angles, or <i>7</i> Bars for $\frac{1}{2}$ length amidships .. .. .			<i>4</i>	<i>3</i>	<i>7</i>	<i>✓</i>		
" Distance of frames from Moulding edge to moulding edge, all fore and aft .. .. .				<i>23</i>	<i>✓</i>			
REVERSED FRAME Angles .. .. .			<i>5</i>	<i>3</i>	<i>4</i>	<i>✓</i>		
REVERSED ANGLES on floors .. .. .			<i>5</i>	<i>3</i>	<i>7</i>	<i>✓</i>		
FLOORS, depth and thickness of Floor Plate at mid-line for $\frac{1}{2}$ length amidships .. .. .				<i>22</i>	<i>10.8</i>	<i>✓</i>		
" height extended at the Bilges .. .. .				<i>44</i>	<i>120.3</i>	<i>✓</i>		
FLOORS AND BRACKETS in Cell Double Bottoms .. .. .			<i>✓</i>					
" Distance apart .. .. .			<i>✓</i>					
CENTRE GIRDER, in Double Bottom, depth and thickness .. .. .								
" Angles, Top .. .. . Bottom .. .. .								
SIDE GIRDERS, number and thickness .. .. .								
" Angles .. .. .								
MARGIN PLATE, depth (exclusive of flange) and thickness .. .. .								
" Angles .. .. .								
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake .. .. .								
" in Engine and Boiler Space .. .. .								
" Remainder in Holds .. .. .								
BEAMS, <i>Upper</i> Deck, Single Angle, Bulb Angle, Plate or Tee Bulb .. .. .			<i>8</i>	<i>5½</i>	<i>9</i>	<i>✓</i>		
" Angles on upper edge .. .. .				<i>✓</i>				
" Average space .. .. .				<i>46</i>				
BEAMS, <i>Main</i> Deck, Single Angle, Bulb Angle, Plate or Tee Bulb .. .. .			<i>9</i>	<i>5½</i>	<i>10</i>	<i>✓</i>		
" Angles on upper edge .. .. .				<i>✓</i>				
" Average space .. .. .				<i>46</i>				
BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb .. .. .								
" Angles on upper edge .. .. .								
" Average space .. .. .								
BEAMS, Hold, or Orlop, Plate or Tee Bulb .. .. .								
" Angles on upper edge .. .. .								
" Average space .. .. .								
BEAMS, <i>Peep and Bridge</i> Deck, Angle, Bulb Angle, Plate or Tee Bulb .. .. .			<i>4</i>	<i>3</i>	<i>6</i>	<i>✓</i>		
" Angles on upper edge .. .. .				<i>✓</i>				
" Average space .. .. .				<i>46</i>				
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb .. .. .								
" Angles on upper edge .. .. .								
" Average space .. .. .								
PILLARS, Hold .. .. .			<i>4</i>	<i>3½</i>		<i>✓</i>		
PILLARS, Deck ( <i>Lower</i> ) .. .. .			<i>25</i>			<i>✓</i>		
" .. .. .								
WEB-FRAMES, in Fore Body, No. and spacing .. .. .								
" Breadth & Thickness .. .. .								
" No. of Side Stringers .. .. .								
WEB-FRAMES, in After Body, No. and spacing .. .. .								
" Breadth & Thickness .. .. .								
" No. of Side Stringers .. .. .								
" Size of Angles or Tee Bars to Web Frames .. .. .								

## KEELSONS &amp; STRINGERS.

CENTRE LINE KEELSON, Vertical Plate above floors, *Through Plate*, or Intercoastal Plate .. .. . *16 120*  
 " Rider Plate .. .. . *12 120*  
 " Bulb Plate to Intercoastal Keelson .. .. . *✓*  
 " Horizontal Plates on Floors .. .. . *5½ 4 98*  
 " Angles .. .. . *5½ 4 98*  
 SIDE KEELSON, Angles .. .. . *5½ 4 98*  
 " Bulb Plate above floors, for *practically full length* .. .. . *✓*  
 " Intercoastal Plate for *practically full length* .. .. . *3 3 8.7*  
 " Attached to outside Plating with Angle .. .. . *3 3 8.7*  
 BILGE KEELSON, Angles .. .. . *5½ 4 98*  
 " Bulb Plate above floors, for *practically full length* .. .. . *✓*  
 " Intercoastal Plate for *practically full length* .. .. . *3 3 8.7*  
 " Attached to outside Plating with Angle .. .. . *3 3 8.7*  
 BILGE STRINGER, Angle .. .. . *5½ 3½ 8.7*  
 " Bulb Plate for *full length* .. .. . *6 8 7.4*  
 " Intercoastal Plate for *full length* .. .. . *6 8 7.4*  
 " Attached to outside Plating with Angle .. .. . *5½ 3½ 8.7*  
 SIDE STRINGER, Angle .. .. . *5½ 3½ 8.7*  
 " Bulb or Intercoastal Plate for *full lng.* .. .. . *6 8 7.4*  
 " Attached to outside Plating with Angle .. .. . *5½ 3½ 8.7*  
 Deck Stringer Plate, on ends of Beams, breadth and thickness .. .. . *Iron 35 7.7*  
 " Angle on ditto .. .. . *4 4 8.7*  
 " Flat of Deck, *Iron or Steel*, for *full length* .. .. . *6*  
 " Wood *Deck* Material & thickness .. .. . *How fastened to Beams*  
 Deck Stringer Plate, breadth and thickness .. .. . *Iron 59 9.7*  
 " Diagonal Tie Plates on Beams, No. of pairs .. .. . *12 9.8*  
 " Flat of Deck, *Iron or Steel*, for *full length* .. .. . *7.46*  
 " Wood *Deck* Material & thickness .. .. . *3½*  
 Lower Deck Stringer Plate, breadth and thickness .. .. . *✓*  
 " Flat of Deck, Material & Thickness .. .. . *✓*  
 Hold or Orlop Stringer Plate, breadth and thickness .. .. . *✓*

## PLATING.

FLAT PLATE KEEL, breadth and thickness .. .. . *✓*  
 " Doubling or inch thickness and length applied .. .. . *✓*  
 PLATES in Garboard Strakes, breadth and thickness .. .. . *42 11-10*  
 " from Garboard to lower part of Bilges .. .. . *10-8 10-9*  
 " Bilges, number of Strakes and thickness .. .. . *2 Strakes 10-9*  
 " Of doubling at Bilge, and length applied .. .. . *✓*  
 " from upper part of Bilge to lower edge of Sheerstrake .. .. . *10-8*  
 " Sheerstrake, breadth and thickness .. .. . *48 10-8*  
 " Upper Sheerstrake .. .. . *40 13-8*  
 " Of doubling at Sheerstrake and length applied .. .. . *10-8*  
 " Peep and Awning Decked Sides .. .. . *✓*  
 " Bridge do. .. .. . *✓*  
 " Forecastle do. .. .. . *✓*  
 Bulkheads No. *6* No. per Rule *5* Height up *Open 8½* .. .. . *✓*  
 Thickness of *6/28* How secured to sides of ship *By single angle* .. .. . *5½ 5½ 103*  
 Size of Vertical Angle Irons *7x3.5* and distance apart *30* ins. .. .. . *7 3 8*  
 Are the outside Plates doubled two spaces of Frames in length? *No. Brackets fitted*

## RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES.

*Edges of shell plating double riveted throughout butts of shell plating triple riveted for ½ length, quadruple where over rule width, double riveted at ends. Butts of main & spur deck stringer plates triple riveted for ½ length double at ends*

## GENERAL REMARKS (state quality of Workmanship and present condition of Vessel).

*Workmanship good & in accordance with approved plans. Found a few fittings deck machinery etc*

Surveyor's Signature