

1st 2 Dks., R. Q. Dk.,
and Pt. Awning Dk.

IRON OR STEEL STEAMER.

No. 24630

State if Report is also sent on the Machinery of the Vessel *Yes*
Date of completion of Report *16th Nov 1906*
Date, First Survey *30th March*
Port of *Glasgow*
Last Survey *16th Nov 1906*
Rig *One pole mast*

Received at London Office *NOV 20 1906*

Survey held at *Renfrew*
On the *Steel Twin Screw Hopper dredger "KARNAFULI."*
TONNAGE under
Tonnage Deck... *186.15*
Do. of Poop *13.90*
Do. of Raised Qr. *8.76*
Do. of Break... *90*
Do. of Bridge House *809.71*
Do. of Forecastle *259.11*
Do. of Houses on Deck *7.30*
Do. of excess of Hatchways *543.30*
Do. above Crown of *809.71*
Engine Room *259.11*
Less Crew Space *7.30*
Less above Crown of *809.71*
Engine Room *259.11*
TONNAGE FOR FEES *543.30*
Less Engine Room *259.11*
Less Navigation Spaces *7.30*
Register Tonnage *543.30*
as cut on Beam

ONE OR TWO DECKED VESSEL.

CLASS *A.1 "Hopper dredger"*

Half Breadth (moulded) *18.00*
Depth from upper part of Keel to top of Main Deck Bms. *16.25*
Girth of Half Midship Frame (as per Rule) *32.25*
1st Number *66.50*
Length on deck from after part of stem to fore part of stern post *188.83*
2nd Number *12.557*
Proportions—Breadths to Length *5.24*
Depths to Length—Main Deck to top of Keel *11.62*
Destined Voyage *Chittagong*

Master *Yes*
Year of appointment *(1) As master in service of owner of present vessel:—19 (2) As master of this vessel:—19*
Built at *Renfrew*
When built *1906* Launched *22nd Oct 1906*
By whom built *Messrs W. Simons & Co*
Owners *Trustees of the Port of Chittagong*
Managers *(Where necessary to be entered in Reg. Book.)*
Residence *Chittagong*
Port belonging to *Chittagong*

LENGTH on Deck as per Rule *188* Feet. *10* Inches. BREADTH—Moulded *36* Feet. *0* Inches. DEPTH, ACTUAL—Top of Floors to top of Main Deck Beams *14* Feet. *11* Inches. No. of Decks with Flat laid *One* No. of Tiers of Beams *One*
Dimensions of Ship per Register, Length, *190* breadth, *36.15* depth, *14.9* Moulded Depth, *15* ft. *6* ins. Round of Beam, Actual *9* ins.

FRAMING.			FORGINGS AND CASTINGS.		
	Inches in Ship.	Inches per Rule Or as Approved.		Inches in Ship.	Inches per Rule Or as Approved.
FRAME, Angles, <i>7</i> or <i>8</i> Bars, for $\frac{1}{2}$ length amidships	<i>4</i>	<i>3</i>	KEEL, Bar or Side Plates depth and thickness	<i>Flat plate Kul</i>	
Do. for $\frac{1}{2}$ at each end	<i>4</i>	<i>3</i>	STEM, moulding and thickness	<i>7x2</i>	<i>7x2</i>
Do. in way of Double Bottoms at Solid Floors.			STERN-POST for Rudder do. do. <i>(2 in. Kg)</i>	<i>7x3</i>	<i>7x3</i>
" " at intermdt. Bkts.			" for Propeller		
Spacing of Frames from centre to centre	<i>24</i>	<i>24</i>	MAIN PIECE of Rudder diameter at head <i>(AM)</i>	<i>5</i>	<i>5</i>
EVERSED FRAME, Angles	<i>3</i>	<i>3</i>	do. at heel	<i>32x32</i>	
DEEP FRAMING, depth of girder			RUDDER, how constructed <i>Forged from frame Plated</i>		
FLOORS, depth and thickness of Floor Plate at mid-line for $\frac{1}{2}$ length amidships	<i>18</i>	<i>18</i>	Can the Rudder be unshipped afloat? <i>Yes</i>		
" in way of Engines and Boilers	<i>16</i>	<i>16</i>	KEELSONS AND STRINGERS.		
" thickness at the ends of vessel			CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate	<i>7</i>	<i>7</i>
" depth at $\frac{1}{2}$ the half breadth, as per Rule	<i>16</i>	<i>16</i>	" Rider Plate		
" height extended at the Bilges	<i>Straight across</i>		" Bulb Plate to Intercoastal Keelson	<i>7</i>	<i>7</i>
FLOORS & BRACKETS, in Cell Dble Bottoms			" Horizontal Plates on Floors	<i>4</i>	<i>3</i>
" " state if flanged (top & bottom)			" Angles	<i>7</i>	<i>4</i>
" " Spacing			SIDE KEELSON, Angles		
NTRE GIRDER, in Double Bottom, depth and thickness			" Bulb or Plate above floors for lng.		
" " Angles, Top			" Intercoastal Plate for length		
" " Bottom			" Attached to outside plating with Angle		
DE GIRDERS, number on each side & thickness state if flanged (top & bottom)			BILGE KEELSON, Angles	<i>4</i>	<i>3</i>
EGIN PLATE, depth (exclusive of flange) and thickness			" Bulb or Plate above floors for <i>3/4</i> lng.	<i>7</i>	<i>7</i>
" Angles to Outside Plating			" Intercoastal Plate for length	<i>3</i>	<i>3</i>
" Floors			" Attached to outside plating with Angle	<i>4</i>	<i>3</i>
" Height of Floors at the Bilges			BILGE STRINGER Angles	<i>4</i>	<i>3</i>
ER BOTTOM PLATING, breadth and thickness of Middle Line Strake			" Bulb Plate for <i>3/4</i> length	<i>7</i>	<i>7</i>
" thickness in Engine and Boiler space			" Intercoastal Plate for length		
" Remainder in Holds			" Attached to outside plating with Angle	<i>4</i>	<i>3</i>
MS, Main and Raised Quarter Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	<i>6</i>	<i>3</i>	SIDE STRINGER Angles	<i>4</i>	<i>3</i>
" Angles on Upper Edge	<i>24</i>	<i>24</i>	" Bulb or Intercoastal Plate for lng.		
" Spacing	<i>24</i>	<i>24</i>	" Attached to outside plating with Angle		
MS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	<i>5</i>	<i>3</i>	Main and Raised Quarter Deck Stringer Plate, breadth and thickness	<i>40</i>	<i>9</i>
" Angles on Upper Edge	<i>24</i>	<i>24</i>	" Angle on ditto	<i>32x32</i>	<i>9</i>
" Spacing	<i>24</i>	<i>24</i>	" Tie Plates, outside Hatchways	<i>Deck plating increased in thickness in way of large openings</i>	
MS, Hold, Plate or Tee Bulb	<i>9</i>	<i>7</i>	" Diagonal Tie Plates on Bms., No. of Pairs	<i>6</i>	<i>6</i>
" Angles on Upper Edge	<i>24</i>	<i>24</i>	" Main Dk* Iron or Steel for <i>full</i> lng.		
" Spacing	<i>24</i>	<i>24</i>	" R. Q. Dk* Iron or Steel for <i>full</i> lng.		
IS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb	<i>5</i>	<i>3</i>	" Wood Deck, Material & thickness		
" Angles on Upper Edge	<i>24</i>	<i>24</i>	Lower Deck Stringer Plate, breadth and thickness		
" Spacing	<i>24</i>	<i>24</i>	" Angles on ditto, No.		
IS, Bridge or Pt. Awning Deck, Angle, Bulb Angle, Plate, or Tee Bulb	<i>4</i>	<i>3</i>	" Tie Plates, outside Hatchways		
" Angles on Upper Edge	<i>48</i>	<i>48</i>	" Deck* Material and thickness		
" Spacing	<i>24</i>	<i>24</i>	Hold Stringer Plate		
IS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	<i>6</i>	<i>3</i>	" Angles on ditto, No.		
" Angles on Upper Edge	<i>24</i>	<i>24</i>	Poop Deck Stringer Plate, breadth & thickness	<i>32x32</i>	<i>6</i>
" Spacing	<i>24</i>	<i>24</i>	" Angle on ditto	<i>32x32</i>	<i>7</i>
IS, In 'tween Decks, Size and Spacing	<i>3' as required</i>		" Tie Plates	<i>6</i>	<i>6</i>
" " Hold			" Deck, Material and thickness	<i>Steel</i>	<i>6</i>
" " Quarter, 'tween Dks., "			Bridge or Pt. Awning Deck Stringer Plate, breadth and thickness		
" " in Hold			" Angle on ditto		
AMES, In Fore Body, No. and Spacing			" Tie Plates		
" " Brdth. & Thickness			" Deck, Material and thickness	<i>Steel</i>	<i>6</i>
No. of Side Stringers	<i>Four</i>		Forecastle Deck Stringer Plate, brdth & thcknss	<i>32x32</i>	<i>6</i>
WEB FRAMES, In E. <i>2</i> Space, No. & Spacing	<i>11</i>	<i>7</i>	" Angle on ditto	<i>32x32</i>	<i>7</i>
" " Brdth. & Thickness			" Tie Plates		
WEB FRAMES, In After Body, No. and Spacing			" Deck, Material and thickness	<i>Steel</i>	<i>6</i>
" " Brdth. & Thickness			Are the outside Plates doubled two spaces of Frames in length? <i>Diamond plates fitted</i>		
" No. of Side Stringers	<i>3</i>	<i>3</i>	Are the Sluice Valves and Watertight Doors in efficient working order? <i>Yes</i>		
" Size of Angle or Tee Bars to Web Frames	<i>3</i>	<i>3</i>			
BRACKET PLATES to Stringers between Web Frames, Depth and Thickness					

PLATING. STRAKES. AS IN SHIP. PER RULE OR AS APPROVED. RIVETING. BUTTS. EDGES. Ordinary or Joggled? Ordinary. Double or Treble and for what Length. Rivets. Diam. Spacing cr. to cr. Strafs. Breadth. Thick-ness. If LAPPED. Breadth. For what Length.

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, outside Plating, &c.? Open hearth process. W. Beardmore & Co. Steel Co. of Scotland, Glasgow. Has the Steel been tested as required by the Rules? Yes.

FRAMES extend in one length from Middle line, wellside & Hopper side to Deck. REVERSED FRAMES on floors and frames extend from across floors & to deck alternately double across floors in Engine & Boiler spaces.

MASTS, SPARS, &c. LOWER MASTS. Fore, Main, Mizzen. Bowsprit. Topmasts, Yards and Remainder of Spars. Rigging, Material and Size, Shrouds, Stays. Sails, Suit of. Sails and the following spare sails.

Equipment No. Letter. Tonnage U.Dk. or Plating No. for Trawlers. ANCHORS. Number of Certificate. Anchors. Weight, Ex. Stock. Weight of Stock. Test, per Certificate. Description of Anchor. Makers. Where and when tested and Superintendent.

CHAIN CABLES. Number of Certificate. Length and size supplied. Test per Certificate. Weight of Chain Cable. Length & Size per Table 22. Description. Makers of Cables. Where and when tested and Superintendent. Material. Length and Size supplied. Breaking Test of Steel Wire. Length and Size per Table 22.

HAWSERS AND WARPS. Number of Certificate. Length and size supplied. Test per Certificate. Weight of Chain Cable. Length & Size per Table 22. Description. Makers of Cables. Where and when tested and Superintendent. Material. Length and Size supplied. Breaking Test of Steel Wire. Length and Size per Table 22. Boats. Pumps, Number. Windlasses. Engine Room Skylights. Coal Bunker Openings. Ceiling in Holds. Cargo Hatchways. State size No. 1 Hatch. Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch. Bulwarks, height above deck and description. The above is a correct description. Builder's Signature. Surveyor's Signature. Surveyor to Lloyd's Register of British and Foreign Shipping.

10-3 NOV 20 1906

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with the case)

M 30/12/06

E 21/6/06

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed*

Is the riveted work properly closed? *yes*

Are the liners between the frames and plates solid single pieces? *yes*

Do the holes for riveting plate to frames, butt straps, or plate

to plate, &c., conform well to each other? *yes*

Are the rivet holes well and sufficiently countersunk in the plate and punched

from the faying surfaces? *yes*

Do any rivets break into or through the seams or butts of the plating? *a few*

Are the butts of Plating, Stringers, &c., properly shifted and strapped? *yes*

Have all the upper and weather decks been tested as required by the Rules (Sec. 23, par 24)? *yes*

State results of tests *Satisfactory*

Have all the gutterways been tested as required by the Rules (Sec. 23, par. 25)? *yes*

State results of tests *Satisfactory*

General Remarks (State quality of workmanship, &c.) *Workmanship good.*

This vessel has been built in accordance with the approved plans, the Secretary's letters of above dates and in general conformity to the Rules for the Class contemplated.

During launching (bow first) the port stern frame was broken through the sole, and through the after post above the lower gunwale. The rudder stock was bent at the neck, and lower pintle bent. The vessel was afterwards placed in dry dock, the stern frame removed and repaired by welding on a new sole piece, the rudder stock faired and a new lower pintle fitted. For further particulars see copy of Damage Report attached hereto, also Forging Report for repairs to Stern Frame & Rudder

3. Plans & 3 Reports on Ship Forgings & 1 Report for repairs to forgings

The Surveyor should state the Number of Report and Name of any Sister Vessel.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop *12.5* ft., R.Q.D. or Break *—* ft., Bridge DK. *—* ft., F'castle *19.5* ft. (in feet and tenths) where the Poop is on top of the R.Q.D., or when the Poop or R.Q.D. is joined to the B.D., this should be distinctly stated *—*

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) *1. SK (Steel)*

Official No. *—*; Signal Letters *—*

State if Machinery is fitted aft *No*

How are the surfaces preserved from oxidation? Inside *Paint & Cement*

Outside *Paint*

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors *—*

Where fitted.	*Length.	Water Capacity.	Where fitted.	*Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	<i>—</i>		Fore peak tank,	<i>—</i>	
Double bottom, under Engines and Boilers,	<i>—</i>		After peak tank,	<i>—</i>	
Double bottom, if under Engines only,	<i>—</i>		Deep tank, aft	<i>—</i>	
Double bottom, if under Boilers only,	<i>—</i>		Deep tank, forward	<i>—</i>	
Double bottom, forward,	<i>—</i>		Other tanks, if fitted,	<i>—</i>	
Total capacity			(If necessary, furnish further information by sketch.)		

* The wells are not to be included in the lengths of the tanks.

State whether the above have been tested as required by the Rules *—*

Order for Special Survey No. *1097*

Date *20. 1. 06*

No. *436* in builder's yard.

DATES OF SURVEYS held while building

1906: Mar. 30. Apr. 9 19 26 May 1 9 14 17 22 25 Jun 1 6 11 14 21 29 July 3 6 10 24 Aug. 1 6 10 15 16 20 24 27 Sep. 3 6 10 13 27 Oct. 2 9 16 17 19 22 29 30 31 Nov. 3 9 10 12 14 16

Total No. of Visits *48*

The amount of Entry Fee£ *2* : : :

Fees applied for, 19 NOV 1906

Certificate to be sent to *Glasgow*

Special.....£ *40* : *10* :

Received by me, *22. 11. 06*

Travelling Expenses, if any £ *2* : *17* :

State whether the Vessel has been built under Special Survey *yes*

I am of opinion this Vessel should be Classed *+ A1 Steel Hopper Dredger*

Surveyor to Lloyd's Register of British and Foreign Shipping. *J. D. Nares.*

With, or without Freeboard, as condition of Class *Without.*

Committee's Minute

Character assigned *+ A1 (Steel) "Hopper Dredger." Lloyd's S. C. S.*

The Surveyors are requested not to write on or below the Committee's Minute.