

REPORT ON MACHINERY.

No. 16783

Port of Hull

Received at London Office WED. 10 MAY 1905

No. in Survey held at Hull Date, first Survey Jan 11th Last Survey May 5th 1905
 Reg. Book. 21 Supp on the Sc. K. Vesta (Number of Visits 32) Tons ^{Gross} 240 _{Net} 100
 Master Selby Built at Selby By whom built Lochane Sons When built 1905
 Engines made at } Hull By whom made } Messrs Charles D. Holmes & Co when made } 1905
 Boilers made at } Hull By whom made } Messrs Charles D. Holmes & Co when made } 1905
 Registered Horse Power 69-670 Owners Grimsby Atlas Steam Fishing Co. Ltd. Port belonging to Grimsby
 Nom. Horse Power as per Section 28 69-670 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Twin Compound No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12 1/4" ~ 2 1/2" ~ 35" Length of Stroke 24" Revs. per minute 112 Dia. of Screw shaft ^{as per rule} 7.04" _{as fitted} 7 1/4" Material of screw shaft } Steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight
 in the propeller boss Yes If the liner is in more than one length are the joints burned burned If the liner does not fit tightly at the part
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If two
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 2'-7"
 Dia. of ^{plain} shaft ^{as per rule} 6.35" _{as fitted} 6 5/8" Dia. of Crank shaft journals ^{as per rule} 6.64" _{as fitted} 6 7/8" Dia. of Crank pin 6 1/8" Size of Crank webs 13 1/16" x 4 5/8" Dia. of thrust shaft under
 collars 6 1/2" Dia. of screw 8'-6" Pitch of screw 10'-6" to 11'-6" No. of blades 4 State whether moveable No Total surface 28 sq
 No. of Feed pumps One Diameter of ditto 2 1/2" Stroke 24" Can one be overhauled while the other is at work
 No. of Bilge pumps One Diameter of ditto 2 1/2" Stroke 24" Can one be overhauled while the other is at work
 No. of Donkey Engines One Sizes of Pumps 2 3/4" x 5" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two two inches In Holds, &c. One 2" to slush well, One 2" to
hold, Ejector suction from E.R. Bilge holds with discharge on deck
 No. of bilge injections 1 sizes 3" Connected to condenser, or to circulating pump pumps Is a separate donkey suction fitted in Engine room & size Yes 2"
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible None
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the discharge pipes above or below the deep water line above
 Are they each fitted with a discharge valve always accessible on the plating of the vessel Yes Are the blow off cocks fitted with a spigot and brass covering plate Yes
 What pipes are carried through the bunkers hold suction How are they protected Wood casing
 Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges Yes
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock before launching Is the screw shaft tunnel watertight None
 Is it fitted with a watertight door worked from

BOILERS, &c.— (Letter for record 8) Total Heating Surface of Boilers 1135 sq Is forced draft fitted No
 No. and Description of Boilers One cyl. Multi Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs
 Date of test 12-4-05 Can each boiler be worked separately Yes Area of fire grate in each boiler 33 sq No. and Description of safety valves to
 each boiler Two Spring Area of each valve 3.9 sq Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 5" Mean dia. of boilers 12'-6" Length 10'-0" Material of shell plates Steel
 Thickness 1 1/2" Range of tensile strength 39-32 tons Are they welded or flanged Yes Descrip. of riveting: cir. seams L D long. seams D B S J R
 Diameter of rivet holes in long. seams 1 1/32" Pitch of rivets 7" Lap of plates or width of butt straps 15"
 Per centages of strength of longitudinal joint ^{rivets} 86.5 Working pressure of shell by rules 185 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring 7" x 1 1/2" No. and Description of Furnaces in each boiler Two Holmes Material Steel Outside diameter 41"
 Length of plain part ^{top} 7" _{bottom} 1 1/2" Thickness of plates ^{crowns} 1 1/16" _{bottom} 1 1/16" Description of longitudinal joint Welded No. of strengthening rings 4 Corr.
 Working pressure of furnace by the rules 198 lbs Combustion chamber plates: Material Steel Thickness: Sides 23/16" Back 1 1/16" Top 23/32" Bottom 23/32"
 Pitch of stays to ditto: Sides 8 1/2" x 9" Back 9" x 8 1/2" Top 8 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 207 lbs
 Material of stays Steel Diameter at smallest part 1 5/8" Area supported by each stay 78 3/4 sq Working pressure by rules 236 lbs End plates in steam space:
 Material Steel Thickness 1 1/16" Pitch of stays 16" x 16" How are stays secured D. n. w. Working pressure by rules 208 lbs Material of stays Steel
 Diameter at smallest part 57/64" Area supported by each stay 256 sq Working pressure by rules 225 lbs Material of Front plates at bottom Steel
 Thickness 7/8" Material of Lower back plate Steel Thickness 15/16" Greatest pitch of stays 14 3/4" Working pressure of plate by rules 197 lbs
 Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 7/8" Back 7/8" Mean pitch of stays 9"
 Pitch across wide water spaces 15" Working pressures by rules 180 lbs Girders to Chamber tops: Material Iron Depth and
 thickness of girder at centre 8 3/4" x 13" Length as per rule 2'-8 1/2" Distance apart 8" Number and pitch of Stays in each 3 8 1/2"
 Working pressure by rules 180 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked
 separately Yes Diameter 18" Length 10' Thickness of shell plates 1 1/16" Material Steel Description of longitudinal joint Welded Diam. of rivet
 holes 1 1/32" Pitch of rivets 7" Working pressure of shell by rules 180 lbs Diameter of flue 18" Material of flue plates Steel Thickness 1 1/16"
 If stiffened with rings Yes Distance between rings 18" Working pressure by rules 180 lbs End plates: Thickness 1 1/16" How stayed Welded
 Working pressure of end plates 180 lbs Area of safety valves to superheater 180 lbs Are they fitted with easing gear Yes

To a Report also sent on the hull of the ship

2000-004-Copyable Ink.



