

REPORT ON MACHINERY.

No. 52390

Port of Newcastle

Received at London Office

TUES. FEB 19 1907

No. in Survey held at Newcastle Date, first Survey Aug 22 '06 Last Survey Feb 17 1907

Reg. Book. on the S/S "Sisak" (Number of Visits 33)

Master Built at Newcastle By whom built Armstrong Whitworth Tons {Gross 4657 Net 2970 When built 1906-7

Engines made at Newcastle By whom made Wallsend Slipway 6 1/2 when made 1906-7

Boilers made at " By whom made " when made 1906-7

Registered Horse Power 478 Owners Deutsche Dampfschiffahrts-Gesellschaft Port belonging to Hamburg

Nom. Horse Power as per Section 28 468 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines In Cpd. No. of Cylinders 3 1/2 No. of Cranks 3

Dia. of Cylinders 27. 45 75 Length of Stroke 48 Revs. per minute 67 Dia. of Screw shaft 15 3/8 Material of screw shaft S

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 - 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 - Length of stern bush 5'5"

Dia. of Tunnel shaft 13 3/4 Dia. of Crank shaft journals 14 1/2 Dia. of Crank pin 14 1/2 Size of Crank webs 29 1/2 x 9 1/2 Dia. of thrust shaft under collars 14 1/2 Dia. of screw 18 f. Pitch of Screw 18 f. No. of Blades 4 State whether moveable yes Total surface 110 f.

No. of Feed pumps 4 Diameter of ditto 7 x 9 1/2 Stroke 21 Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 4 3/4 Stroke 24 Can one be overhauled while the other is at work yes

No. of Donkey Engines 3 Sizes of Pumps 10 x 7 x 12 1/2 x 5 1/2 x 8 x 9 x 8 No. and size of Suctions connected to both Bilge and Donkey pumps 4 of 3 1/2

In Engine Room 4 of 3 1/2 In Holds, &c. N^o 1-2-3-2 of 3 1/2 N^o 4-2 of 3 1/2

No. of Bilge Injections 1 sizes 8" Connected to condenser, or to circulating pump CR Is a separate Donkey Suction fitted in Engine room & size 3 1/2

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 yes

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 none How are they protected -

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

Dates of examination of completion of fitting of Sea Connections 3/12/06 of Stern Tube 30/11/06 Screw shaft and Propeller 30/11/06

Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from top platform

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Spencer.

Total Heating Surface of Boilers 6504 1/2 Is Forced Draft fitted yes No. and Description of Boilers 3 S. ended.

Working Pressure 180 lbs Tested by hydraulic pressure to 360 Date of test 14.12.06 No. of Certificate 7393

Can each boiler be worked separately yes Area of fire grate in each boiler 58.5 f. No. and Description of Safety Valves to each boiler 2 Spring Area of each valve 11.04 Pressure to which they are adjusted 185 Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 2 feet Mean dia. of boilers 14.3 3/8 Length 11'6" Material of shell plates S

Thickness 1 5/16 Range of tensile strength 28.32 Are the shell plates welded or flanged ends Descrip. of riveting: cir. seams 2 r laps long. seams d. butts Diameter of rivet holes in long. seams 1 3/8 Pitch of rivets 9 1/16 Lap of plates or width of butt strap 20 8

Per centages of strength of longitudinal joint 89.6 Working pressure of shell by rules 206 Size of manhole in shell 16" x 12

Size of compensating ring McNeil No. and Description of Furnaces in each boiler 3 Morrison Material S Outside diameter 3'9 1/8

Length of plain part top 9'6" bottom 9'6" Thickness of plates 9'6" Description of longitudinal joint weld No. of strengthening rings -

Working pressure of furnace by the rules 192 Combustion chamber plates: Material S Thickness: Sides 5/8 Back 5/8 Top 5/8 Bottom 15/16

Pitch of stays to ditto: Sides 8 x 7 1/4 Back 8 x 7 1/2 Top 7 1/2 x 7 1/4 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 220

Material of stays S Diameter at smallest part 1.45 Area supported by each stay 59 Working pressure by rules 193 End plates in steam space: Material S Thickness 1 1/16 Pitch of stays 15 1/2 x 14 How are stays secured d nuts Working pressure by rules 230 Material of stays S

Diameter at smallest part 5.27 Area supported by each stay 210 Working pressure by rules 250 Material of Front plates at bottom S Thickness 1 Material of Lower back plate S Thickness 1 1/16 Greatest pitch of stays 13 1/16 Working pressure of plate by rules 217

Diameter of tubes 2 1/2 Pitch of tubes 3 1/16 x 3 3/8 Material of tube plates S Thickness: Front 1 Back 3/4 Mean pitch of stays 7 1/2

Pitch across wide water spaces 13 Working pressures by rules 212 Girders to Chamber tops: Material S Depth and thickness of girder at centre 8 1/2 x 1 1/2 Length as per rule 30 1/2 Distance apart 8 Number and pitch of stays in each 3-1/4

Working pressure by rules 188 1/2 Superheater or Steam chest; how connected to boiler - Can the superheater be shut off and the boiler worked separately - Diameter - Length - Thickness of shell plates - Material - Description of longitudinal joint - Diam. of rivet holes - Pitch of rivets - Working pressure of shell by rules - Diameter of flue - Material of flue plates - Thickness -

If stiffened with rings - Distance between rings - Working pressure by rules - End plates: Thickness - How stayed -

Working pressure of end plates - Area of safety valves to superheater - Are they fitted with easing gear -

If not, state whether, and when, one will be sent? If a Report also sent on the Hull of the Ship?

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