

REPORT ON MACHINERY.

No. 69445

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State of writing Report 10 When handed in at Local Office 20 DEC 1916 19 Port of Newcastle on Tyne
 To, in Survey held at Newcastle on Tyne Date, First Survey 1st Oct 1916 Last Survey 19th Dec 1916
 Reg. Book. on the TRIPLE SCREW STEAMER "KNIAZ POJARSKY" (Number of Vents 8) Gross 2432 Tons Not 891
 Master Built at Wallsend By whom built Swan Hunter & Wigham Richardson When built 1916
 Engines made at Wallsend on Tyne By whom made Swan Hunter & Wigham Richardson when made 1916
 Boilers made at Wallsend on Tyne By whom made Swan Hunter & Wigham Richardson when made 1916
 Registered Horse Power Owners Russian Imperial Govt Port belonging to
 Com. Horse Power as per Section 28 904 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks Three
 Dia. of Cylinders 21 1/2 - 35 1/2 - 58 Length of Stroke 36 Revs. per minute 110 Dia. of Screw shaft as per rule 11 1/8 Material of screw shaft Steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube No liner Is the after end of the liner made water tight
 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 If two
 liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 5' 3"
 Dia. of Tunnel shaft as per rule 10 1/4 Dia. of Crank shaft journals as per rule 10 9/16 Dia. of Crank pin 12 1/2 Size of Crank webs 7 1/2 x 10 Dia. of thrust shaft under
 collars 12 3/4 Dia. of screw 12 1/2 Pitch of Screw 16 1/2 No. of Blades 4 State whether moveable Yes Total surface 53 5/8 sq. ft.
 To. of Feed pumps 3 Diameter of ditto 10 Stroke 26 Can one be overhauled while the other is at work Yes
 To. of Bilge pumps 2 Diameter of ditto 6 Stroke 6 Can one be overhauled while the other is at work Yes
 To. of Donkey Engines 2 and 2 Bilge Suctions of Pumps 16 x 2 1/2 x 1 1/2 2 9 x 6 x 10 No. and size of Suctions connected to both Bilge and Donkey pumps
 in Engine Room 2: 2 1/2" dia. IN AFTER ENGINE ROOM 2: 2 1/2" dia. In Holds, &c. SIDE BUNKERS 4: One 2 1/2" dia. in each In FORWARD
 STROKEHOLD: 2: 2 1/2" dia. IN AFTER STROKEHOLD: 3: 2 1/2" dia. IN TUNNEL WELLS 1: 2 1/2" dia. in each
 No. of Bilge Injections 5 sizes 4 Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room size Yes 2 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
 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 Bilge suction pipes How are they protected By strong 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
 Dates of examination of completion of fitting of Sea Connections 1/12/16 of Stern Tube 4/12/16 Screw shaft and Propeller 4/12/16
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from TWEEN DECK LEVEL

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel J. Spencer & Sons Ltd. 6.S.B.
 Total Heating Surface of Boilers 14478 Is Forced Draft fitted Yes No. and Description of Boilers 2: Cylindrical built: Simple
 Working Pressure 180 lbs. Tested by hydraulic pressure to 360 lbs. Date of test 25/9/16, 19/9/16, 22/9/16 No. of Certificate 8896-8897-8899
 Can each boiler be worked separately Yes Area of fire grate in each boiler 58 1/2 No. and Description of Safety Valves to
 each boiler 2: Overpressure loaded Area of each valve 9 1/2 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 About 14" Mean dia. of boilers 14 1/2 Length 11 1/2 Material of shell plates Steel
 Thickness 1 1/2 Range of tensile strength 29 1/2 to 32 1/2 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Lap double
 long. seams 29 1/2 to 32 1/2 Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 4 1/2 Lap of plates or width of butt straps 16 1/2
 Per centages of strength of longitudinal joint rivets 85 1/2 plate 85 1/2 Working pressure of shell by rules 181 lbs. Size of manhole in shell 18" x 12"
 Size of compensating rings 29 1/2 x 1 1/2 FLANGED. No. and Description of Furnaces in each boiler 3: Monomonic Material Steel Outside diameter 45 1/2
 Length of plates top 4 1/2 bottom 4 1/2 Thickness of plates crown 1/2 bottom 3/4 Description of longitudinal joint Welded No. of strengthening rings none
 Working pressure of furnace by the rules 181 lbs. Combustion chamber plates: Material Steel Thickness: Sides 1/2 Back 3/4 Top 1/2 Bottom 3/4
 Pitch of stays to ditto: Sides 9 1/2 x 9 1/2 Back 9 x 8 1/2 Top 9 1/2 x 9 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 181 lbs.
 Material of stays Steel Diameter at smallest part 2 1/2 Area supported by each stay 90 1/2 Working pressure by rules 20 1/2 End plates in steam space
 Material Steel Thickness 1 1/2 Pitch of stays 19 1/2 x 18 1/2 How are stays secured With nuts Working pressure by rules 184 lbs. Material of stays Steel
 Diameter at smallest part 6 1/2 Area supported by each stay 360 1/2 Working pressure by rules 183 lbs. Material of Front plates at bottom Steel
 Thickness 3/4 Material of Lower back plate Steel Thickness 3/4 Greatest pitch of stays 13 1/2 x 14 1/2 Working pressure of plate by rules 199 lbs.
 Diameter of tubes 2 1/2 Pitch of tubes 3 1/2 x 3 1/2 Material of tube plates Steel Thickness: Front 3/4 Back 3/4 Mean pitch of stays 9 1/2
 Pitch across wide water spaces 13 1/2 Working pressures by rules 185 lbs 229 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 10" x 14" Length as per rule 23 5/8 Distance apart 9" Number and pitch of stays in each 2: 9 1/2"
 Working pressure by rules 183 lbs Superheater or Steam chest; how connected to boiler None 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

