

# REPORT ON MACHINERY.

No. 15420

Received at London Office WED OCT 31 1917  
WEST HARTLEPOOL

Date of writing Report 19 When handed in at Local Office 30/10/17 Port of Date, First Survey 31<sup>st</sup> July 1917. Last Survey 17<sup>th</sup> Sept 1917

No. in Survey held at Hartlepool Reg. Book. on the Machinery for S Blumer & Co. 240 Vessel Tons } Gross } Net } When built

Master Built at By whom built Engines made at Hartlepool By whom made Richardson, Westgarth & Co. Ld when made 1917

Boilers made at Newcastle By whom made Sam Hunter & William Richardson when made Port belonging to

Registered Horse Power Owners Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

m. Horse Power as per Section 28 Description of Engines Auguston Turbine Generator No. of Cylinders No. of Cranks

Length of Stroke Revs. per minute 76 Dia. of Screw shaft as per rule 13.28 Material of screw shaft as fitted 13.28 steel

Is the after end of the liner made water tight the propeller boss 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 4-6 1/2

Dia. of Tunnel shaft as per rule 11.2 Dia. of Crank shaft journals as per rule Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under

collars Dia. of screw 16-0 Pitch of Screw 15-0 No. of Blades four State whether moveable 200 Total surface 80.87

No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room In Holds, &c. Is a separate Donkey Suction fitted in Engine room & size

No. of Bilge Injections sizes Connected to condenser, or to circulating pump Are the sluices on Engine room bulkheads always accessible

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are they Valves or Cocks

Are all connections with the sea direct on the skin of the ship Are the Discharge Pipes above or below the deep water line

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Blow Off Cocks fitted with a spigot and brass covering plate

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel How are they protected

What pipes are carried through the bunkers Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

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

BOILERS, &c. (Letter for record 5) Manufacturers of Steel Spencer & Sons Ltd No. and Description of Boilers No single Ended Cyl. Mult

Total Heating Surface of Boilers 3551 Is Forced Draft fitted No. of Certificate

Working Pressure 220 lbs Tested by hydraulic pressure to 440 lbs Date of test No. and Description of Safety Valves to

Can each boiler be worked separately Area of fire grate in each boiler Are they fitted with easing gear

each boiler Area of each valve Pressure to which they are adjusted

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

bottom Thickness of plates bottom Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Working pressure of furnace by the rules Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules End plates in steam space:

Material of stays Area at smallest part Area supported by each stay Working pressure by rules Material of stays

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of Front plates at bottom

Area at smallest part Area supported by each stay Working pressure by rules Working pressure of plate by rules

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

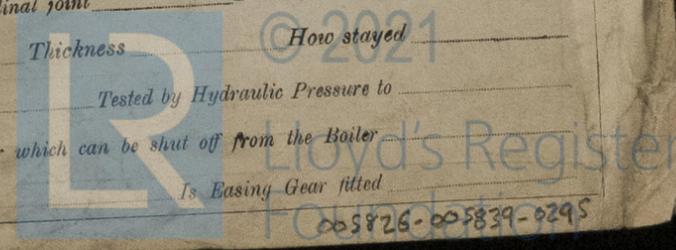
Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

Tested by Hydraulic Pressure to

SUPERHEATER. Type Date of Approval of Plan Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Date of Test Pressure to which each is adjusted Is Easing Gear fitted

Diameter of Safety Valve



005826-005839-0295

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1917. July 31. Aug 1. 17. 21. Sep 3. 4. 17. During erection on board vessel - - - Total No. of visits at West Hill 7.

Is the approved plan of main boiler forwarded herewith sent to Newcastle " " " donkey " " "

Dates of Examination of principal parts—Cylinders — Slides — Covers — Pistons — Rods — Connecting rods — Crank shaft — Thrust shaft — Tunnel shafts 21/7/17 17/8/17 Screw shaft 17/8/17 3/4/17 Propeller 17/8/17 4/1/17 Stern tube 31/7/17 1/8/17 Steam pipes tested — Engine and boiler seatings — Engines holding down bolts — Completion of pumping arrangements — Boilers fixed — Engines tried under steam — Completion of fitting sea connections — Stern tube — Screw shaft and propeller — Main boiler safety valves adjusted — Thickness of adjusting washers — Material of Crank shaft — Identification Mark on Do. — Material of Thrust shaft — Identification Mark on Do. — Material of Tunnel shafts Iron Identification Marks on Do. (5938) (29/10/17) Material of Screw shafts steel Identification Marks on Do. (5938) (3/4/17) (5938) (3/4/17)

Material of Steam Pipes — Test pressure — Is an installation fitted for burning oil fuel — Is the flash point of the oil to be used over 150°F. — Have the requirements of Section 49 of the Rules been complied with — Is this machinery duplicate of a previous case — If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. Please see Certificate Letter E 940-1916.)

Certificate (if required) to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute. Assigned

Table with columns for fee type (Entry Fee, Special, Donkey Boiler Fee, Travelling Expenses), amount (£), and when applied for/received.

Signature of Engineer Surveyor to Lloyd's Register of Shipping.