

REPORT ON MACHINERY.

No. 28921

Received at London Office TUE - 9 NOV. 1915

Date of writing Report 8-11-15 Where handed in at Local Office 8-11-15 Port of Hull
 No. in Survey held at Hull Date, First Survey 26-11-14 Last Survey 1-11-15
 Reg. Book. 226 on the Steam Trawler "CARILON" (Number of Volls 54 Gross 226 Net 109
 Master Built at Beverley By whom built Cook, Welton & Gemmell When built 1915
 Engines made at Hull By whom made Amos & Smith (No 2656) when made 1915
 Boilers made at Hull By whom made Amos & Smith when made 1915
 Registered Horse Power Owners A. L. Black. Port belonging to Grimsby
 Nom. Horse Power as per Section 28 75 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12", 21" & 34" Length of Stroke 24" Revs. per minute 110 Dia. of Screw shaft as per rule 7.23" Material of screw shaft Iron
 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
 Is 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 34"
 Dia. of Tunnel shaft as per rule 6.48" Dia. of Crank shaft journals as per rule 6.8" Dia. of Crank pin 7" Size of Crank webs 13 3/4" Dia. of thrust shaft under
 collars 7" Dia. of screw 8-9" Pitch of Screw 11-0" No. of Blades 4 State whether moveable no Total surface 29 sq ft
 No. of Feed pumps 1 Diameter of ditto 2 5/8" Stroke 12" Can one be overhauled while the other is at work
 No. of Bilge pumps 1 Diameter of ditto 2 5/8" Stroke 12" Can one be overhauled while the other is at work
 No. of Donkey Engines 1 Sizes of Pumps 6 1/4" x 4 3/4" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2-2", one forward & one aft In Holds, &c. two 2", forepeak & slushwell
 2" ejector from all bilges.
 No. of Bilge Injections 1 sizes 3" Connected to condenser, or to circulating pump pump a separate Donkey Suction fitted in Engine room & size 2 1/2" ejector
 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 Forward hold suction How are they protected wood casings
 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 1-4-15 of Stern Tube 1-4-15 Screw shaft and Propeller 1-4-15
 Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Steel Co. of Scotland
 Total Heating Surface of Boilers 1268 sq ft Is Forced Draft fitted no No. and Description of Boilers One single ended.
 Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of test 27-9-15 No. of Certificate 3103
 Can each boiler be worked separately Area of fire grate in each boiler 31.5 sq ft No. and Description of Safety Valves to
 each boiler 2 spring loaded Area of each valve 3.97 sq ft Pressure to which they are adjusted 205 lbs Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork alt 7" Mean dia. of boilers 12-9 1/16" Length 10-0" Material of shell plates S
 Thickness 1 5/32" Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D.R.
 long. seams TRDBS Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 7 3/4" Lap of plates or width of butt straps 16 3/4"
 Per centages of strength of longitudinal joint rivets 91.4 plate 84.67 Working pressure of shell by rules 200 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring 40" x 30" x 1 1/8" No. and Description of Furnaces in each boiler 3 plain Material S Outside diameter 3-1 5/8"
 Length of plain part top 81 3/4" Thickness of plates crown 13" bottom 16" Description of longitudinal joint welded No. of strengthening rings
 Working pressure of furnace by the rules 214 Combustion chamber plates: Material S Thickness: Sides 3/4" Back 23/32" Top 11/16" Bottom 3/4"
 Pitch of stays to ditto: Sides 8 3/8" x 9 1/2" Back 8" x 9 1/4" Top 8 1/2" x 9 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 202
 Material of stays S Diameter at smallest part 2-066" Area supported by each stay 79.5 sq in Working pressure by rules 234 End plates in steam space
 Material S Thickness 1 1/16" Pitch of stays 16 1/2" x 15 3/4" How are stays secured N & W Working pressure by rules 206 Material of stays S
 Diameter at smallest part 6-10" Area supported by each stay 260 sq in Working pressure by rules 244 Material of Front plates at bottom S
 Thickness 1 1/16" Material of Lower back plate S Thickness 15/16" Greatest pitch of stays 14 1/2" x 8" Working pressure of plate by rules 222
 Diameter of tubes 3 1/2" Pitch of tubes 4 7/8" x 5" Material of tube plates S Thickness: Front 1 1/16" Back 7/8" Mean pitch of stays 10-8"
 Pitch across wide water spaces 14 1/2" Working pressures by rules 206 lbs Girders to Chamber tops: Material S Depth and
 thickness of girder at centre 8" x 2" Length as per rule 2-8 3/4" Distance apart 8 1/2" Number and pitch of stays in each two 9 1/2"
 Working pressure by rules 211 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

W 25-0127

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set of feed, bilge, & air pump valves, one main & one donkey check valve, & a quantity of bolts & nuts & iron of various sizes.

The foregoing is a correct description,

FOR AMOS & SMITH LTD,

J. R. Bachevalery

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1914: - Nov 26. Dec 11. 1915: - Jan 12. Feb 18. 23. Mar 1. 5. 9. 12. 18. 22. 26. 29. Apr 1. 16. 20. 22. 23. During erection on board vessel - - 26 May 4. 12. 19. 21. 27. Jun 4. 10. 17. 22. 26. Jul 2. 9. 14. 21. 27. 30. Aug 6. 13. 20. 27. Sep 3. 13. 20. 25. 27. 28. Oct 5. 9. 11. 12. 20. 22. 23. 27. Nov 1. Total No. of visits 54

Is the approved plan of main boiler forwarded herewith

yes

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 3-9-15 Slides 5-10-15 Covers 3-9-15 Pistons 13-9-15 Rods 13-9-15

Connecting rods 5-10-15 Crank shaft 5-10-15 Thrust shaft 28-9-15 Tunnel shafts ✓ Screw shaft 26-3-15 Propeller 26-3-15

Stern tube 26-3-15 Steam pipes tested 23-10-15 Engine and boiler seatings 26-3-15 Engines holding down bolts 20-10-15

Completion of pumping arrangements 1-11-15. Boilers fixed 20-10-15 Engines tried under steam 27-10-15.

Main boiler safety valves adjusted 27-10-15

Thickness of adjusting washers

3/8" P.S.

Material of Crank shaft Steel Identification Mark on Do. 5-10-15 Material of Thrust shaft Steel Identification Mark on Do. 28-9-15

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Iron Identification Marks on Do. 26-3-15

Material of Steam Pipes S.D. Copper

Test pressure 400 lbs per sq. in.

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 no If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been constructed under special survey in accordance with the approved plans & the rules of this Society. The materials & workmanship are good; the boiler & steam pipes have been tested as above by hydraulic pressure, & found sound & good. The machinery has been properly fitted & secured on board, & on completion tried under steam & found satisfactory. The safety valves have been adjusted under steam, & tested for accumulation, which did not exceed 210 lbs per sq. inch. In my opinion the vessel is eligible for the record 'i-LMC 11, 15

It is submitted that this vessel is eligible for THE RECORD + LMC 11. 15.

J.W.D.

10/11/15

P. Fitzgerald.

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee ... £ 1 : - : - When applied for, Special ... £ 11 : 5 : - 8/11 1915 Donkey Boiler Fee ... £ : : : When received, Travelling Expenses (if any) £ : 2 : - 30/11/15

Committee's Minute FRI. 12 NOV. 1915

Assigned

+ Lmb 11. 15

RECEIVED CERTIFICATE



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