

Rpt. 4.

REPORT ON MACHINERY.

No. 32989

Date of writing Report 6th 1921 19 21 When handed in at Local Office

Received at London Office

SAT. 22 OCT. 1921

No. in Survey held at Hull
Reg. Book.21/10/1921 Port of Hull
Date, First Survey 26/8/20 Last Survey 18/10/1921(Number of Visits 43)

on the SS "BRAEMORE"

Master

Built at St. YarnmouthBy whom built Pitchers & CoTons } Gross
NetWhen built 1921Engines made at HullBy whom made Amos Smith & Co (No 3256) when made 1921Boilers made at HullBy whom made Amos Smith & Co (No 3256) when made 1921

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28 91Is Refrigerating Machinery fitted for cargo purposes ☒Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines

Triple ExpansionNo. of Cylinders 3No. of Cranks 3Dia. of Cylinders 13"-22½"-37"Length of Stroke 26"Revs. per minute 110Dia. of Screw shaft as per rule 7.6"Material of SIs 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 no

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 yesLength of stern bush 2'-10"Dia. of Tunnel shaft as per rule 6.77"Dia. of Crank shaft journals as per rule 7.11"Dia. of Crank pin 7½"Size of Crank webs 11½" x 4½"Collars 7½"Dia. of screw 9'-6"Pitch of Screw 10'-6"No. of Blades 4State whether moveable no Total surface 33 ftTo. of Feed pumps 2Diameter of ditto 2 7/8"Stroke 12"Can one be overhauled while the other is at work yesTo. of Bilge pumps 2Diameter of ditto 2 7/8"Stroke 12"Can one be overhauled while the other is at work yesTo. of Donkey Engines 2Sizes of Pumps 7.5" x 8" 6" x 6" x 6"

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

Engine Room 5'-2" 3 in ER. & 2 in Boiler holdIn Holds, &c. 2'-2" in hold. 1'-2 1/4" to fore peak tank, and 1'-2 1/4" to after peak tankTo. of Bilge Injections 1sizes 3 1/2"Connected to condenser, or to circulating pump pumpIs a separate Donkey Suction fitted in Engine room & size 2" injectorAre all the bilge suction pipes fitted with roses yesAre the roses in Engine room always accessible yesAre the sluices on Engine room bulkheads always accessible yesAre all connections with the sea direct on the skin of the ship yesAre they Valves or Cocks BothAre they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yesAre the Discharge Pipes above or below the deep water line aboveAre they each fitted with a Discharge Valve always accessible on the plating of the vessel yesAre the Blow Off Cocks fitted with a spigot and brass covering plate yesThat pipes are carried through the bunkers Forward SuctionsHow are they protected wood casingAre all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yesAre the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yesIs the Screw Shaft Tunnel watertight yesIs it fitted with a watertight door yesworked from yesBOILERS, &c.—(Letter for record S)Manufacturers of Steel John Spencer & SonTotal Heating Surface of Boilers 1610 ftIs Forced Draft fitted noNo. and Description of Boilers One Single endedWorking Pressure 180 lbsTested by hydraulic pressure to 360 lbsDate of test 5.4.21No. of Certificate 3478Can each boiler be worked separately yesArea of fire grate in each boiler 50 ft

No. and Description of Safety Valves to

Each boiler 2-SpringArea of each valve 5.94Pressure to which they are adjusted 180 lbsAre they fitted with easing gear yesLeast distance between boilers or uptakes and bunkers or woodwork InsideMean dia. of boilers 13'-9 3/4"Length 10'Material of shell plates SThickness 1 1/8"Range of tensile strength 28/32Are the shell plates welded or flanged yesDescrip. of riveting: cir. seams DR & Lseams DR & LDiameter of rivet holes in long. seams 1 3/16"Pitch of rivets 7 1/8"Lap of plates or width of butt straps 17 1/2"Centages of strength of longitudinal joint 93.5plate 84.8Working pressure of shell by rules 180Size of manhole in shell 16" x 12"of compensating ring 3'-4" x 2'-6" x 1 1/2"No. and Description of Furnaces in each boiler 3 plainMaterial SOutside diameter 3'-5 5/8"Length of plain part top 72'-5"bottom 67'Thickness of plates 13"Description of longitudinal joint weldedNo. of strengthening rings yesWorking pressure of furnace by the rules 290Combustion chamber plates: Material SThickness: Sides 2 3/32"Back 2 1/32"Top 3/4"Bottom 2 3/32"Length of stays to ditto: Sides 9 1/2" x 9 3/8"Back 9" x 9"Top 9 1/2" x 9 1/2"If stays are fitted with nuts or riveted heads nutsWorking pressure by rules 197Material of stays SArea at smallest part 2.066Area supported by each stay 91.25Working pressure by rules 206

End plates in steam space:

Material SThickness 1 1/8"Pitch of stays 17 1/2" x 18"How are stays secured DR & LWorking pressure by rules 190Material of stays SArea at smallest part 6.6Area supported by each stay 315Working pressure by rules 220Material of Front plates at bottom SThickness 3 1/2"Material of Lower back plate SThickness 1 5/8"Greatest pitch of stays 14" x 7"Working pressure of plate by rules 220Diameter of tubes 3 1/2"Pitch of tubes 4 1/4" x 4 1/4"Material of tube plates SThickness: Front 3 1/2"Back 7/8"Mean pitch of stays 9 1/2" x 9 1/2"Distance across wide water spaces 14"Working pressures by rules 185Girders to Chamber tops: Material S

Depth and

Thickness of girder at centre 9" - 1 3/4"Length as per rule 31.5"Distance apart 9 1/2"Number and pitch of stays in each 2-9 1/2"Working pressure by rules 230

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

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

© 2021

Lloyd's Register
Foundation

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two each top and bottom end connecting rod bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts and nuts, one set each feed & bilge pump valves, iron of various sizes, a quantity of assorted bolts, nuts, etc.

The foregoing is a correct description,

For AMOS & SMITH LTD.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1920 Aug 26 Oct 4-26 Nov 8 Dec 9-11 20 22 29 1921 Jan 3 7 14 24 28 Feb 1 4 7 14 18 19 March 4 7 Apr 14 5 Jun 22 Aug 11 26 Sept 12 13 14 15 19 21 23
During erection on board vessel - - - 26 27 30 Oct 3 4 6 11 18 48
Total No. of visits

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 3.1.21. Slides 24.1.21. Covers 24.1.21. Pistons 24.1.21. Rods 1.2.21.
Connecting rods 1.2.21. Crank shaft 22.12.20 Thrust shaft 6.1.21. Tunnel shafts ✓ Screw shaft — Propeller —
Stern tube — Steam pipes tested 30.9.21 Engine and boiler seatings 12.9.21 Engines holding down bolts 30.9.21
Completion of pumping arrangements 3.10.21 Boilers fixed 30.9.21 Engines tried under steam 11.10.21
Completion of fitting sea connections — Stern tube — Screw shaft and propeller —
Main boiler safety valves adjusted 4.10.21 Thickness of adjusting washers P $\frac{13}{32}$ S $\frac{5}{16}$
Material of Crank shaft S. Identification Mark on Do. 2298. Material of Thrust shaft S. Identification Mark on Do. 2300.
Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts ✓ Identification Marks on Do. ✓
Material of Steam Pipes Copper Test pressure 360 lbs
Is an installation fitted for burning oil fuel no 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 engines & boiler of this vessel have been constructed under special survey in accordance with the Rules. The materials & workmanship are sound and good. The boiler tested by hydraulic pressure and with the engines secured on board & tested under steam they are now in good order and safe working condition and respectfully submitted as being eligible in my opinion to be classed with the notation of + LMC 10-21 in The Register book.

It is submitted that this vessel is eligible for THE RECORD + LMC 10-21 CL.

Roll 22/10/21

The amount of Entry Fee ... £ 2 : 0 : 0
Special ... £ 22 : 15 : 0
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 21/10/21
When received, 22.10.1921

Committee's Minute

Assigned

FRI OCT. 28 1921

+ LMC 10-21

C.L.

J.G. MacKillop
Engineer Surveyor to Lloyd's Register of Shipping.



© 2021

Lloyd's Register Foundation