

Rpt. 4.

REPORT ON MACHINERY

No. 73384

THU AUG. 5 1920

Received at London Office

Date of writing Report 19 When handed in at Local Office 10 Port of Newcastle-on-Tyne
No. in Survey held at Millington Quay Date, First Survey 2nd Mar 1920 Last Survey 23rd July 1920
Reg. Book. on the SS HOMERON ex KILLYGORM (Number of Visits 7)
Master Built at Middlesbrough By whom built Smiths & Co. G. Ltd. Tons Gross 629
Engines made at Sunderland By whom made North Eastern Marine Eng. Co. Ltd. Net 287
Boilers made at By whom made when made 1918
Registered Horse Power Owners Homeland S. & Co. Ltd. Port belonging to Newcastle
Nom. Horse Power as per Section 28 110 116 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Inverted Triple Expansion No. of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 16" 26" Length of Stroke 26" Revs. per minute 8.4 Dia. of Screw shaft as per rule 8.4 Material of screw shaft as fitted 8.4
Is the screw shaft fitted with a continuous liner the whole length of the stern tube 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 If two liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 48 1/2
Dia. of Tunnel shaft as per rule 7.95 Dia. of Crank shaft journals as per rule 8.8 Dia. of Crank pin 8.9 Size of Crank webs 10.54 Dia. of thrust shaft under collars 8.75 Dia. of screw 9.6 Pitch of Screw 8.6 No. of Blades 4 State whether moveable No Total surface 26.4
No. of Feed pumps 2 Diameters of ditto 7" Stroke 18" Can one be overhauled while the other is at work Yes
No. of Bilge pumps 2 Diameters of ditto 6" Stroke 6" Can one be overhauled while the other is at work Yes
No. of Donkey Engines 2 Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 2. 2 1/2" Anti Room 1-2 1/2" Tunnel 1-2 1/2" In Holds, &c. 1-2 1/2" 1-2 1/2" (p) No 2 Hold 1-2 1/2" (s)
No. of Bilge Injections 1 sizes 6 Connected to condenser, or to circulating pump 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 none
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 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
Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from S.R. platform

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel
Total Heating Surface of Boilers 1825 sq ft Is Forced Draft fitted No No. and Description of Boilers One Single Endless Mult?
Working Pressure 200 lbs sq in Tested by hydraulic pressure to 400 lbs sq in Date of test 21.9.18 No. of Certificate British Lap
Can each boiler be worked separately Yes Area of fire grate in each boiler 57.5 sq ft No. and Description of Safety Valves to each boiler Two Spring loaded Area of each valve 59.4 sq in Pressure to which they are adjusted 200 lbs sq in Are they fitted with easing gear Yes
Smallest distance between boilers and bunkers or woodwork 9" Inside Mean dia. of boilers 13.0" Length 11.6" Material of shell plates Steel
Thickness 1 1/2" Range of tensile strength 24/25 100" Are the shell plates welded or flanged No Descrip. of riveting: cir. seams D.R. Lap long. seams T.R. D.C. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 9 1/6" Lap of plates or width of butt straps 19"
Per centages of strength of longitudinal joint rivets 88.8 plate 86.5 Working pressure of shell by rules 200 Size of manhole in shell 16" x 12"
Size of compensating ring 2 1/2" x 2 1/2" x 1 1/2" No. and Description of Furnaces in each boiler 3 Doughton Material Steel Outside diameter 8.5 1/4"
Length of plain part top bottom Thickness of plates crown 1 1/6" Description of longitudinal joint welded No. of strengthening rings 1
Working pressure of furnace by the rules 211 Combustion chamber plates: Material Steel Thickness: Sides 1/6" Back 1/6" Top 1/6" Bottom 1"
Pitch of stays to ditto: Sides 9" x 8 1/4" Back 8 1/4" x 8 1/2" Top 9" x 8 1/2" If stays are fitted with nuts or riveted heads None Working pressure by rules 207
Material of stays Steel Area at smallest part 2.02 sq in Area supported by each stay 78.75 sq in Working pressure by rules 232 End plates in steam space: Material Steel Thickness 1 1/2" Pitch of stays 17 1/2" How are stays secured D. nuts Working pressure by rules 218 Material of stays Steel
Area at smallest part 5.95 sq in Area supported by each stay 306.25 sq in Working pressure by rules 202 Material of Front plates at bottom Steel
Thickness 1" Material of Lower back plate Steel Thickness 1" Greatest pitch of stays 14" x 9" Working pressure of plate by rules 250
Diameter of tubes 2 1/2" Pitch of tubes 3 1/4" x 3 1/6" Material of tube plates Steel Thickness: Front 1" Back 1/2" Mean pitch of stays 9 3/4"
Pitch across wide water spaces 13 1/4" Working pressures by rules 204 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8" x 1 1/4" Length as per rule 31 1/4" Distance apart 8 1/2" Number and pitch of stays in each 2-9"
Working pressure by rules 202 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

012431-012438-0168

IS A DONKEY BOILER FITTED? No.

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— 2 Top End Bolts nuts - 2 Bottom End Bolts nuts - 2 main Bearing Bolts - 1 set of

Coupling Bolts Full sets of spares for main feed pumps - Air pump - Centrifugal Circ. pumps + Ballast pump
Asbestos wire - bolts nuts - 1 Top End Bearing - 1/2 main Bearing - 1 Bottom End Bearing

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - - -
During erection on board vessel - - -
Total No. of visits

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 12.7.20 Slides 12.7.20 Covers 12.7.20 Pistons 12.7.20 Rods 12.7.20

Connecting rods 12.7.20 Crank shaft 29.6.20 Thrust shaft 29.6.20 Tunnel shafts 29.6.20 Screw shaft Propeller 29.6.20

Stern tube Steam pipes tested 16.6.20 Engine and boiler seatings 29.6.20 Engines holding down bolts 29.6.20

Completion of pumping arrangements 23.7.20 Boilers fired Engines tried under steam 23.7.20

Completion of fitting sea connections Stern tube Screw shaft and propeller

Main boiler safety valves adjusted 23.7.20 Thickness of adjusting washers Pat 7/16" Sta. 25"

Material of Crank shaft Steel Identification Mark on Do. Material of Thrust shaft Steel Identification Mark on Do.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.

Material of Steam Pipes Wrought Iron 4 1/2" dia x 7/16" thick Test pressure 600 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 Yes If so, state name of vessel "Kil" Class vessel.

General Remarks (State quality of workmanship, opinions as to class, etc. The machinery and Boilers were built under

the supervision and to the requirements of the British Corporation. The Boilers, Scantlings are to a plan approved by

Lloyd's Register of Shipping on the 25th Sept 1917.

The vessel was placed on Messrs. Blenkins' Slipway, Millington Quay. The propeller, after end of stem bush and

sea-connection fastenings were examined. The Tail Shaft was not drawn at this time.

The cylinders, slides, covers, pistons, rods, connecting rods, crank, thrust & tunnel shafting, the condenser,

ballast, air, circulating, feed pumps were opened out, overhauled and examined.

The main Boilers, its mountings, doors fastenings were examined. The Scantlings of the Engines & Boilers

were checked and noted as far as practicable. One Boiler had been removed from the vessel and the position

of the one now installed was altered. The seating and fastenings are efficient. The Boiler is marked

The fan and forced draught installation was removed. The main steam pipes were annealed

and tested after alterations. The main auxiliary machinery was tried under steam. The main Boiler

safety valves were adjusted under steam & found in order.

In my opinion the vessel is eligible for record L.M.C. 7.20

The amount of Entry Fee £ 10 10

Special £ 10 10

Donkey Boiler Fee £

Travelling Expenses (if any) £

Committee's Minute

Assigned

FRI. AUG. 13 1920

FRI. SEP. 10 1920

TUE. NOV. 29 1921

CERTIFICATE WRITTEN

VESS

These particulars

Signal Letters (if any)

Official Number.

144906

Co., Date, and Port of Pro

Whether British or Foreign Built.

British

Number of Decks

Number of Masts

rigged

tern

uild

alleries

lead

ramework and descrip

vessel

umber of Bulkheads

umber of water ballast

and their capacity in t

al to quarter the depth from we

to bottom of keel

of

ines.

Description of Engine

Reciprocating

Triple Expan

of

Particulars of Boile

Description

Number

Iron or Steel

Loaded Pressure

20

Gross To

nder Tonnage Deck

ace or spaces between I

rret or Trunk

recastle

idge space

op or Break

le Houses

ck Houses

art House

aces for machinery, and

Section 78 (2) of the Me

1894

cess of Hatchways

Gross Tonnage

ductions, as per Contra

Registered Tonna

1.—The tonnage of the en

Deck for propelling

2.—The undermentioned

ken Space a

Name of Master

of Owners

Residence, and De

ameland

14

Robert

had 27th

1921

1921

1921

1921

1921

1921

1921

1921

1921

1921

1921