

REPORT ON MACHINERY

No. 36411

11-NOV. 1916

Date of writing Report

19

When handed in at Local Office

19

Port of Glasgow

No. in Survey held at

Glasgow

Date, First Survey

25-2-14

Last Survey

21st October 1916

Reg. Book

on the Liner Screw "GLENAMOI" (oil Eng)

(Number of Visits)

137

Master

Built at Irvine

By whom built Harland & Wolff Ltd (Glasgow)

Tons

Gross 7269.00

Net

4655.97

When built 1916

Engines made at

Glasgow

By whom made

Burmester & Waind (No 039)

when made 1916

Boilers made at

Annan

By whom made

Cochran & Co

when made 1916

Registered Horse Power

Owners

Glen Line (McGregor & Co) Ltd Port belonging to Glasgow

Nom. Horse Power as per Section 28

655

Is Refrigerating Machinery fitted for cargo purposes

Yes

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

S. S. Diesel 4 stroke cycle

No. of Cylinders

12

No. of Cranks

12

Dia. of Cylinders

670²/₁₆ in

Length of Stroke

1000³/₈ in

Revs. per minute

110

Dia. of Screw shaft

as per rule 328³/₈ in

Material of

Steel

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

in the propeller boss

Yes

If the liner is in more than one length are the joints burned

Continuous

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

liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush

5'-4"

Dia. of Tunnel shaft

as per rule 306¹/₁₆ in

Dia. of Crank shaft journals

as per rule 390³/₈ in

Dia. of Crank pin

422¹/₁₆ in

Size of Crank webs

590 x 198

Dia. of thrust shaft under

collars

350¹/₁₆ in

Dia. of screw

13-6"

Pitch of Screw

12-0"

No. of Blades

3

State whether moveable

Yes

Total surface

54 ft²

No. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps

2 (Double)

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines

1

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

In Engine Room

Two 3 1/2"

Two 5"

In Holds, &c.

No. 1 hold Two 3 1/2"

No. 2 hold Two 3 1/2"

No. 3 hold Two 3 1/2"

No. 4 hold Three 3 1/2"

No. 5 hold Three 3 1/2"

No. of Bilge Injections

Two sizes 5"

Connected to

condenser or to circulating pumps

Is a separate Donkey Suction fitted in Engine room & size

Yes

5"

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

Done

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 stowage plates

Yes

Are the Discharge Pipes above or below the deep water line

Below

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

None

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

Dates of examination of completion of fitting of Sea Connections

20-9-16

of Stern Tube

20-9-16

Screw shaft and Propeller

20-9-16

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from upper deck

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

an reservoir see Gls Rpt No 35504

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Two, cylindrical

Working Pressure

294 lb

Tested by hydraulic pressure to

588 lb

Date of test

4-10-15

No. of Certificate

13256

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

No. and Description of Safety Valves to

each boiler

Two Spring loaded

Area of each valve

7.07 sq in

Pressure to which they are adjusted

294 lb

Are they fitted with easing gear

No

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

plate

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

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

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

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

W682-0093

W082-0094

Lloyd's Register
Foundation

See Separate Q. 185 now the post-No 35941
Manufacturers of Steel Stewarts & Lloyd Ltd

SPARE GEAR. State the articles supplied:— See Separate list attached & here to ✓

OIL ENGINE COMPANY, LIMITED.

Manufacturer.

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 4-5-16		Slides	-	Covers 29-6-16	Pistons 1-8-16	Rods 7-9-16
Connecting rods 29-6-16		Crank shaft 1-8-16	Thrust shaft 25-10-15	Tunnel shafts 12-10-16	Screw shaft 1-11-15	Propeller 20-9-16
Stern tube 20-9-16		Steam pipes tested	-	Engine and ^{Woukey} boiler seatings 9-8-16	Engines holding down bolts 20-9-16	
Completion of pumping arrangements 12-10-16		^{Woukey} Boilers fixed	12-10-16	Engines tried under steam 12-10-16, 19-10-16		
^{Woukey} Main boiler safety valves adjusted 17-10-16		Thickness of adjusting washers Port $\frac{9}{16}$ " Starboard $\frac{17}{32}$ "				
Material of Crank shafts Steel		Identification Mark on Do. ^{RJB 10-11-15} JE 1-8-16		Material of Thrust shafts Steel		Identification Mark on Do. RJB 25-10-15
Material of Tunnel shafts Steel		Identification Marks on Do. 4R 719, ^{720, 7339, 7350, 736, 745}		Material of Screw shafts Steel		Identification Marks on Do. RJB 1-11-15
Material of Steam Pipes		-		Test pressure		

General Remarks (State quality of workmanship, opinions as to class, &c.) The materials and workmanship are good. The machinery has been built under special survey in accordance with the approved plan and the requirements of the Rules, and has been tried at full power and found to work well and is eligible in our opinion to be classed with record of + LMC 10-16.

This machinery is a duplicate of 35 "Colman's"
Glasgow Report to 36013.

On the 19th October 1916, when returning from the trials of the machinery, the vessel grounded in the Firth of Clyde during foggy weather. She was placed in Govan Dry dock on the 20th October and examined, the stern edges of the bronze propellers were found slightly abraded, and these edges have now been satisfactorily dressed up.

It is submitted that
this vessel is eligible for
THE RECORD + LMC 10.16

Oil Engines 4 SC. SA. 12 Cy $26\frac{3}{8}$ " - $39\frac{3}{8}$ " 655 NHP

The amount of Entry Fee	.. £ 3 : 0 :	When applied for,
Special £ 52 : 15 :	26/10/1916
Donkey Boiler Fee £ :	When received,
Travelling Expenses (if any)	£ : 8 :	28/10/1916

~~Burmeister~~ & Wain, Gls. DB 100 tb

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

Committee's Minute GLASGOW 31 OCT. 1916

Assigned + L.M.C 10-16

1916
MACHINERY CERTIFICATE
WRITTEN 1/11/16

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