

REPORT ON MACHINERY.

No. 38646.

Date of writing Report 15.4.1919 When handed in at Local Office

Received at London Office

THU. 24 APR. 1919

Port of

Glasgow.

No. in Survey held at Glasgow

Date, First Survey 7th Jan. 1918. Last Survey 12th April 1919.

Reg. Book.

on the S.S. "Lombardier" ex "War Jay."

(Number of Visits 6)

Master Built at Glasgow

By whom built Lloyds Royal Belge (S.B.) Ltd. When built 1919

Engines made at Glasgow

By whom made North British Diesel Engine Co. Ltd. when made 1919

Boilers made at Penrith

By whom made W. & A. Simons & Co. Ltd. (626A) when made 1918

Registered Horse Power

Owners Lloyds Royal Belge Societe Anonyme

Port belonging to Antwerp.

Nom. Horse Power as per Section 28 172

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted No

ENGINES, &c.—Description of Engines

Triple

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 18.30.50

Length of Stroke 33

Revs. per minute 80

Dia. of Screw shaft

as per rule 10.4.9

Material of screw shaft 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 —

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 3.4"

Dia. of Tunnel shaft as per rule 9.64

as fitted 9.64

Dia. of Crank shaft journals as per rule 9.32

as fitted 9.32

Dia. of Crank pin 9.2"

Size of Crank webs 18" x 6"

Dia. of thrust shaft under

collars 9.2"

Dia. of screw 13.3"

Pitch of Screw 14.6"

No. of Blades 4

State whether moveable No

Total surface 60 sq

No. of Feed pumps 2

Diameter of ditto 3.2"

Stroke 18"

Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2

Diameter of ditto 3.2"

Stroke 18"

Can one be overhauled while the other is at work Yes

No. of Donkey Engines 3

Sizes of Pumps 1 Ballast 4" x 8" x 3"

2 Feed 7" x 5" x 12"

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

In Engine Room 6 Bilge 2.2"

In Holds, &c. 2 - 2.2" in forward hold. 2 - 2.2" in aft hold.

No. of Bilge Injections 1

sizes 4"

Connected to condenser, or to circulating pump No

Is a separate Donkey Suction fitted in Engine room & size Yes 2.2"

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 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

Is the Screw Shaft Tunnel watertight Yes

Is it fitted with a watertight door Yes

worked from Eng. Room Top Platform.

BOILERS, &c.—(Letter for record 8)

Manufacturers of Steel Steel B. of Scotland.

Total Heating Surface of Boilers 2886

Is Forced Draft fitted No

No. and Description of Boilers 2 Single Ended

Working Pressure 180

Tested by hydraulic pressure to 360

Date of test 7.10.18

No. of Certificate 14484

Can each boiler be worked separately Yes

Area of fire grate in each boiler 48.56 sq

No. and Description of Safety Valves to each boiler Two Spring Loaded

Area of each valve 4.9 sq

Pressure to which they are adjusted 185

Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 7.6"

Mean dia. of boilers 13.0"

Length 10.6"

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

Working pressure of furnace by the rules

Combustion chamber plates

Material

Thickness: Sides

Back

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure 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

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

PERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure

Lloyd's Register

Foundation

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

4020-020

IS A DONKEY BOILER FITTED?

Yes.

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

All as per Specification placed on board and handed over to chief engineer.

The foregoing is a correct description,

NORTH BRITISH DIESEL ENGINE WORKS LTD.

Edwards

Manufacturer.

Assistant Manager.

Dates of Survey while building { During progress of work in shops - - 1918 Jan 4. 11. 14. 24. 25. 31. Feb 8. 12. Mar 11. 18. 20. 24. Apr 4. 14. 22. 25. 29. May 1. 14. 23. 30. June 5. 20. 25. July 21. Aug 18. 25. Sept 6. 7. 25. Oct 3. 14. 21. 22. 24. 29. Nov 4. 15. 22. 28. Dec 6. 11. 19. 1919 Jan 9. 14. 16. 20. 23. Feb 12. 19. 24. 24. Mar 3. 8. 13. 26. Apr 8. 9. 11. 12. Total No. of visits 62.

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 24.10.18 Slides 14.10.18 Covers 14.10.18 Pistons 14.10.18 Rods 14.10.18

Connecting rods 14.10.18 Crank shaft 6.12.18 Thrust shaft 12.2.19 Tunnel shafts 12.2.19 Screw shaft 16.1.19 Propeller 16.1.19

Stern tube 19.2.19 Steam pipes tested 26.3.19 Engine and boiler seatings 19.2.19 Engines holding down bolts 26.3.19

Completion of pumping arrangements 12.4.19 Boilers fixed 26.3.19 Engines tried under steam 12.4.19

Completion of fitting sea connections 24.2.19 Stern tube 24.2.19 Screw shaft and propeller 3.3.19

Main boiler safety valves adjusted 8.4.19 Thickness of adjusting washers Port Boiler P 3 3 3. Starboard Boiler P 3 3 3 2

Material of Crank shaft Steel Identification Mark on Do. 14.11 Material of Thrust shaft Steel Identification Mark on Do. 14.11

Material of Tunnel shafts Steel Identification Marks on Do. 14.11 Material of Screw shafts Steel Identification Marks on Do. 14.11

Material of Steam Pipes Lapwelded Wrought Iron Test pressure 540 lbs per sq. in.

Is an installation fitted for burning oil fuel Yes 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 C 5 Standard Vessels.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Engines & Boilers of this vessel have been built under Special Survey, the workmanship and materials are good, they have been well fitted on board, tried under steam and found to work satisfactorily.

The machinery of this vessel is eligible in my opinion for the record of + LMC 4.19 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 4.19.

JWD.
26/4/19 *ARR*

The amount of Entry Fee £ 32 : 17 : 9
Special ... £
Donkey Boiler Fee ... £
Travelling Expenses (if any) £

When applied for,

23/4/19

When received,

26.8.19

Committee's Minute 23 APR 1919

Assigned + LMC 4.19

H.S. Murray
Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register Foundation