

Rpt. 4.

REPORT ON MACHINERY.

No. 17491.

Date of writing Report 2nd July 1919 When handed in at Local Office 4th July 1919 Port of Greenock
No. in Survey held at Port - Glasgow Date, First Survey 19th June, 1918 Last Survey 19th May, 1919
Reg. Book. on the Steel Screw Steamship "Lea Dogra" (Number of Visits 4)
Master R. Findlay Built at Port Glasgow By whom built William Hamilton & Co. Ltd. Tons } Gross 5559.24
Engines made at Glasgow By whom made David Rowan & Co. Ltd. when made } Net 3425.35
Boilers made at _____ By whom made _____ when made _____
Registered Horse Power _____ Owners The Shipping Controller Port belonging to London
Nom. Horse Power as per Section 28 _____ Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

ENGINES, &c.—Description of Engines

No. of Cylinders _____ No. of Cranks _____

Dia. of Cylinders _____ Length of Stroke _____ Revs. per minute _____ Dia. of Screw shaft _____ as per rule _____ Material of screw shaft _____
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 _____ 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 _____
Dia. of Tunnel shaft _____ as per rule _____ Dia. of Crank shaft journals _____ as per rule _____ Dia. of Crank pin _____ Size of Crank webs _____ Dia. of thrust shaft under collars _____ Dia. of screw _____ Pitch of Screw _____ No. of Blades _____ State whether moveable _____ Total surface _____
No. of Feed pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
No. of Bilge pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
No. of Donkey Engines _____ Sizes of Pumps _____ No. and size of Suctions connected to both Bilge and Donkey pumps _____
In Engine Room _____ In Holds, &c. _____

No. of Bilge Injections _____ sizes _____ Connected to condenser, or to circulating pump _____ Is a separate Donkey Suction fitted in Engine room & size _____
Are all the bilge suction pipes fitted with roses _____ Are the roses in Engine room always accessible _____ Are the sluices on Engine room bulkheads always accessible _____
Are all connections with the sea direct on the skin of the ship _____ Are they Valves or Cocks _____
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the Discharge Pipes above or below the deep water line _____
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel _____ 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 _____
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges _____
Is the Screw Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

BOILERS, &c.—(Letter for record _____) Manufacturers of Steel _____

Total Heating Surface of Boilers _____ Is Forced Draft fitted _____ No. and Description of Boilers _____
Working Pressure _____ Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to each boiler _____
Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
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 _____ Working pressure of shell by rules _____ Size of manhole in shell _____ plate _____
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 _____ bottom _____
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 _____ Area 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 _____
Area 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 _____ 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 _____

W489-0037

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

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

(1918). June 19. (1919). May 6. 15. 19:—

4.

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders

Slides

Covers

Pistons

Rods

Connecting rods

Crank shaft

Thrust shaft

Tunnel shafts

Screw shaft

Propeller

Stern tube

Steam pipes tested

Engine and boiler seatings 15/5/19

Engines holding down bolts

Completion of pumping arrangements

Boilers fixed

Engines tried under steam

Completion of fitting sea connections 19/5/19

Stern tube 19/5/19

Screw shaft and propeller 19/5/19

Main boiler safety valves adjusted

Thickness of adjusting washers

Material of Crank shaft

Identification Mark on Do.

Material of Thrust shaft

Identification Mark on Do.

Material of Tunnel shafts

Identification Marks on Do.

Material of Screw shafts

Identification Marks on Do.

Material of Steam Pipes

Test pressure

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

If so, state name of vessel

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

Vessel taken to Glasgow for Machinery & Boilers to be fitted.

The amount of Entry Fee ... £

Special ... £

Donkey Boiler Fee ... £

Travelling Expenses (if any) £

When applied for,

19.

When received,

19.

Committee's Minute

GLASGOW - 8 JUL 1919

FRI. MAR 19 1920

Assigned See attached machinery report

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