

REPORT ON MACHINERY.

No. 15864
TUE. 18 JAN. 1921

Received at London Office

Date of writing Report 11th July 1921 when handed in at Local Office 17/11 1921 Port of West Hartlepool 3rd March 1921
Date, First Survey 29th July 1920 Last Survey 10th January 1921

No. in Survey held at Hartlepool
Reg. Book. on the steel screw steamer MOUNTPARK (Hills No 141) (Number of Visits 5) Gross Tons 703 Net Tons 513 When built 1921

Master By whom built Messrs C. Hill & Sons (Hull) Ltd Built at Bristol when made 1921

Engines made at Hartlepool By whom made Messrs Richardson, Hartlepool & Co. (No. 2635) when made 1921

Boilers made at Hartlepool By whom made Messrs Richardson, Hartlepool & Co. when made 1921

Registered Horse Power 242 Owners Denholm Line of Steamships Ltd Port belonging to Greenock

Nom. Horse Power as per Section 28 242 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion (Inverted Cyls.) No. of Cylinders Three No. of Cranks Three

Dia. of Cylinders 21, 34, 56 Length of Stroke 36 Revs. per minute 84 Dia. of Screw shaft as per rule 11.875 Material of screw shaft Iron

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 Yes 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 Yes Length of stern bush 4-2

Dia. of Tunnel shaft as per rule 10.23 Dia. of Crank shaft journals as per rule 10.24 Dia. of Crank pin 11 1/4 Size of Crank webs 6 3/4 x 17 1/2 Dia. of thrust shaft under collars 10 7/8 Dia. of screw 14-9 Pitch of Screw 14-9 No. of Blades five State whether moveable No Total surface 715

No. of Feed pumps Two Diameter of ditto 3 1/2 Stroke 21 Can one be overhauled while the other is at work Yes

No. of Bilge pumps Two Diameter of ditto 3 1/2 Stroke 21 Can one be overhauled while the other is at work Yes

No. of Donkey Engines Three Sizes of Pumps Two General Service 4 x 6 & 4 x 4 No. and size of Suctions connected to both Bilge and Donkey pumps In Holds, &c. No. 1 Two of 3", No. 2 Two of 3" No. 3

In Engine Room Two of 3" each Two of 3" No. 4 Two of 3" No. 5 Sum Well 2 1/2" Pump Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2"

No. of Bilge Injections One size 5 Connected to condenser, or to circulating pump Yes Are the sluices on Engine room bulkheads always accessible Yes

Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the valves on Engine room bulkheads always accessible Both

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 Hold system How are they protected Wood casings

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 Top platform

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel Peaseker & Sons Ltd. & Leeds

Total Heating Surface of Boilers 4260 Is Forced Draft fitted No No. and Description of Boilers Two, single ended 3 length pressure

Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 18/12/20 No. of Certificate 3590

Can each boiler be worked separately Yes Area of fire grate in each boiler 61.2 No. and Description of Safety Valves to each boiler No direct spring Area of each valve 4.07 Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 22" Mean dia. of boilers 15-3 Length 10-6 Material of shell plates Steel

Thickness 1 1/32 Range of tensile strength 28 1/2 to 32 1/2 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Lap DR.

long. seams DR. TR. Diameter of rivet holes in long. seams 1 7/32 Pitch of rivets 8 3/8 Lap of plates or width of butt straps 1 1/2

Per centages of strength of longitudinal joint 84.9% Working pressure of shell by rules 182 lb Size of manhole in shell 13 x 16 1/2

Size of compensating ring 4 3/4 x 1 1/32 No. and Description of Furnaces in each boiler Three, upright Material Steel Outside diameter 48 3/4

Length of plain part top 19 Thickness of plates bottom 32 Description of longitudinal joint weld No. of strengthening rings —

Working pressure of furnace by the rules 193.8 lb Combustion chamber plates: Material Steel Thickness: Sides 19 Back 19 Top 19 Bottom 3 1/4

Pitch of stays to ditto: Sides 1/2 x 8 3/4 Back 8 1/4 x 8 Top 1/2 x 8 3/4 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 186 lb

Material of stays Steel Area at smallest part 1 3/8 x 1 3/8 Area supported by each stay 8 3/4 x 1 1/2 Working pressure by rules 180 lb End plates in steam space: Material Steel Thickness 1 3/32 Pitch of stays 3 1/4 x 17 How are stays secured DN & DNW Working pressure by rules 180 lb Material of Front plates at bottom Steel

Area at smallest part 1 1/4 x 6 1/2 Area supported by each stay 1 1/4 x 2 1/2 Working pressure by rules 211 lb Material of Front plates at bottom Steel

Thickness 3/32 Material of Lower back plate Steel Thickness 2 1/2 Greatest pitch of stays 14 x 8 Working pressure of plate by rules 186 1/2 lb

Diameter of tubes 3 1/4 Pitch of tubes 4 1/2 x 4 1/4 Material of tube plates Steel Thickness: Front 3/32 Back 25 Mean pitch of stays 10 1/16

Pitch across wide water spaces 14 1/8 Working pressures by rules 181 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 x 1 3/4 Length as per rule 30 1/2 Distance apart 8 3/4 Number and pitch of stays in each Three 1 1/2

Working pressure by rules 181 lb 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 —

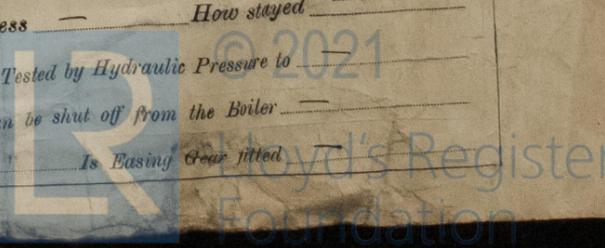
Pitch of rivets — Working pressure of shell by rules — Crown plates — Thickness — How stayed —

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 — Is Easing Gear fitted —

If not, state whether, and when, one will be sent to the Hull of the Ship

5400-175600-15600



IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:-

2 Top end, 2 main turning, 2 bottom end bolts & nuts, 1 set coupling bolts, 1 set piston bolts, spare piston rings, spare valves for all pumps, 1 main, 1 donkey chuck valve, bolts & nuts & iron assorted

The foregoing is a correct description,

L.S. Knight

GENERAL MANAGER

Manufacturer.

Dates of Survey while building: 1920 July 29, Aug 10, 12, 13, 16, 17, 24, 25; Sep 1, 10, 16, 29, 30; Oct 1, 4, 6, 7, 14, 15, 18, 19, 21, 22; Nov 2, 3, 8, 10, 11, 15, 19, 22, 24, 25, 30; Dec 1, 2, 3, 6, 7, 8, 15, 16, 18, 1921 Jan 5, 10, 1920 Dec 1, 14, 22, Jan 18, 20, 24, 26, 28, Feb 28, 14, 16, Mar 3

Dates of Examination of principal parts: Cylinders 25/8, 17/10; Slides 6/12, 20; Covers 2/10, 4/10; Pistons 30/9, 20; Rods 15/8, 19/10; Connecting rods 29/10, 17/10; Crank shaft 18/10, 5/10; Thrust shaft 18/10; Tunnel shafts 14/10, 30/10; Screw shaft 14/10, 3/10; Propeller 2/10; Stern tube 3/12, 20; Steam pipes tested 26.1.21, 2.2.21; Engine and boiler seatings 22-12.20; Engines holding down bolts 18.1.21

Completion of pumping arrangements 14.2.21; Boilers fixed 18.1.21; Engines tried under steam 15.2.21; Completion of fitting sea connections 14-12.20; Stern tube 14-12.20; Screw shaft and propeller 28-1.21; Main boiler safety valves adjusted 14.2.21; Thickness of adjusting washers 7/16, 5/16, 5/16, 5/16

Material of Crank shaft steel; Identification Mark on Do. (6213) (2714); Material of Thrust shaft steel; Identification Mark on Do. (6213) (2714); Material of Tunnel shafts iron; Identification Marks on Do. (6213) (2714); Material of Screw shafts iron; Identification Marks on Do. (6213) (2714); Material of Steam Pipes Steel & Copper; Test pressure 450 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; Evaporator only tested 50th March No 1157; Copper coils tested 400 lbs; Is this machinery duplicate of a previous case no; If so, state name of vessel no

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

The Engines & Boilers of this vessel have been constructed under special survey. The material & workmanship sound & good, the Boilers have been tested by hydraulic pressure in accordance with the Rules.

All the machinery has been sent forward to the Builders of the vessel at Bristol and will be eligible in my opinion for the Notation *LMC 180th sub date when fitted on board & tried by steam.

To complete survey - fit the machinery on board & try under steam. The structure case is only rough turned to finish to suit form of stern frame. Safety valves to adjust.

These Engines & Boilers have now been fitted in the above vessel, casing gear fitted & Safety Valves adjusted under steam to above pressure. The Engines have been tried under steam with satisfactory results. This vessel is now eligible for record # L.M.C. 3.21, 180 lbs 2 Single ended boilers

The amount of Entry Fee ... £ 4; Special ... £ 48; Donkey Boiler Fee ... £ 12; Travelling Expenses (if any) £

G. A. Dryden 10/11/21, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 15 MAR. 1921; Assigned + 10/6.3.21

Certificate (if required) to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute.

CERTIFICATE WRITTEN

