

Date of writing Report 26 Sept 1921 When handed in at Local Office

Port of PLYMOUTH

No. in Survey held at PLYMOUTH
Reg. Book.Date, First Survey 18 June 1920 Last Survey 6 Sept 1921
(Number of Visits 13)

19753 on the Steel S.S. "James H. Beasley" (Pilot Boat No. 23)

Tons { Gross 458.87
Net 187.75
When built 1921

Master

Built at Dartmouth

By whom built Philip & Son Ltd

when made 1921-9

Engines made at Dartmouth

By whom made Philip & Son Ltd

when made 1921

Boilers made at Paisley

By whom made J. F. Craig & Co Ltd

Registered Horse Power

Owners The Mersey Dock & Harbour Board

ort belonging to Liverpool

Nom. Horse Power as per Section 28 95.68

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Vent Inverted Triple Exp. S.C.

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 13 1/2 - 22 & 36

Length of Stroke 24

Revs. per minute 130

Dia. of Screw shaft

as per rule 7.43

Material of

screw shaft Mild 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 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

If two

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

Length of stern bush 2'-7"

Dia. of Tunnel shaft

as per rule 6.66

Dia. of Crank shaft journals

as per rule 6.99

Dia. of Crank pin 7 1/4

Size of Crank webs 11 x 4 1/2

Dia. of thrust shaft under

collars 7 1/4

Dia. of screw 9'-0"

Pitch of Screw 10'-6"

No. of Blades 4

State whether moveable No

Total surface 30 ft

No. of Feed pumps 2

Diameter of ditto 4 1/2"

Stroke 10"

Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines 2

Sizes of Pumps

one "Veins" 4 1/2" x 10"

one "Lemon" 4" x 5"

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

In Engine Room One - 2"

In Holds, &c. Two - 2"

No. of Bilge Injections 1

sizes 4"

Connected to condenser, or to circulating pump Yes

Is a separate Donkey Suction fitted in Engine room & size Yes - 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 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 3" Bilge Suction & 4" Sea from Fore Tank

How are they protected Rest on Centre Keelson, covered with wood

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 upper deck.

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

Total Heating Surface of Boilers

Is Forced Draft fitted No

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 2 in. one by Vent. Spring load

Area of each valve 65.94

Pressure to which they are adjusted 180 lb/sq. in.

Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 5"

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

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 caps 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 pressure 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 line: 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

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—Bolts & Nuts for Piston Rod 2 in. N^o. Bolts & Nuts for Connecting Rods 2 in. N^o. Bolts for Main Bearings, 2 in. N^o. Coupling Bolts 1 Set. Fuel pump valves 1 Set. Bridge Pump Valves 1 Set. Air pump valves 1 Set. Bolts & nuts assorted Iron of various sizes. Tubes boiler 6 in. N^o. Tubes Condenser 5/8 in. N^o. Ferrules for D^o 1/2 in. N^o. Fire bars 60 in. N^o. Propeller 1 in. N^o. Brasses for Connecting Rod, Top and 1 pair Bottom end 1 pair

The foregoing is a correct description,
For PHILIP & SON, LIMITED.

J. E. Turner

Manufacturer.

Dates of Survey while building
During progress of work in shops -- June 18. 24 Sept. 3. 30 Oct 19 Nov 18 1921
During erection on board vessel -- 1921 April 28 July 5 Sept 6
Total No. of visits 13

Is the approved plan of main boiler forwarded herewith Yes
" " " donkey " " " None

Dates of Examination of principal parts—Cylinders 7.2.21 Slides 7.2.21 Covers 7.2.21 Pistons 7.2.21 Rods 7.2.21
Connecting rods 3.2.21 Crank shaft 3.2.21 Thrust shaft 3.2.21 Tunnel shafts 3.2.21 Screw shaft 3.2.21 Propeller 28.4.21
Stern tube 3.2.21 Steam pipes tested 5.7.21 Engine and boiler seatings 28.4.21 Engines holding down bolts 5.7.21
Completion of pumping arrangements 28.4.21 Boilers fixed 5.7.21 Engines tried under steam 6.9.21
Completion of fitting sea connections 7.6.21 Stern tube 14.4.21 Screw shaft and propeller 7.6.21
Main boiler safety valves adjusted 6.9.21 Thickness of adjusting washers 57P-5/16f
Material of Crank shaft Steel Identification Mark on Do. ✓ Material of Thrust shaft Steel Identification Mark on Do. ✓
Material of Tunnel shafts Steel Identification Marks on Do. ✓ Material of Screw shafts M-Steel Identification Marks on Do. ✓
Material of Steam Pipes Copper Test pressure 360 lbs per sq. in.
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 No If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) The Main Engines of this vessel were surveyed during construction at Dartmouth in accordance with the Rules. The auxy. Machinery and Boiler were surveyed during fitting up on board and at the steam trial under sea going conditions. The boiler was made at Paisley under special supervision. The material & workmanship are good and efficient and the Boiler & Machinery are in my opinion satisfactory and eligible to be classed with this Society with record of + L.M.C. 9.21.

It is submitted that
this vessel is eligible for
THE RECORD.

+ L.M.C. - 9.21. C.L.

27/10/21.

928

The amount of Entry Fee ... £ 2 : - :
Special ... £ 24 : - :
Donkey Boiler Fee ... £ - : - :
Travelling Expenses (if any) £ 6 : 10 : 7

When applied for, 24.10.1921

When received, 10.11.21

Committee's Minute

TUE. NOV. 11 1921

Assigned + L.M.C. 9.21

J. L. L. L.

Engineer Surveyor to Lloyd's Register of Shipping.



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