

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report

19

When handed in at Local Office

20 OCT 1939

Port of

Received at London Office

Sunderland.

No. in Survey held at

Sunderland.

Date, First Survey

Apr 21

Last Survey

Oct 16 1939.

Reg. Book.

on the Screw Steamer

"HERMISTON"

(Number of Visits 57)

Tons

Gross 4813

Net 2465.

Built at

Sunderland

By whom built

Short Bros. Ld.

Yard No. 454

When built 1939.

Engines made at

Sunderland

By whom made

G. Clark (1938) Ld.

Engine No. 1214.

When made 1939.

Boilers made at

Sunderland

By whom made

G. Clark (1938) Ld.

Boiler No. 1214.

When made 1939.

Registered Horse Power

Owners

R. Chapman &amp; Son

Port belonging to

Newcastle.

Nom. Horse Power as per Rule

359.

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

Yes.

Trade for which Vessel is intended

MACHINES, &amp;c.—Description of Engines

Triple Expansion (Poppet valves on H.P. &amp; M.P.)

Revs. per minute

68

Dia. of Cylinders

21 1/2" - 36 1/2" - 63"

Length of Stroke

45"

No. of Cylinders

3.

No. of Cranks

3.

Crank shaft, dia. of journals

as per Rule

12.585"

as fitted

13 1/8"

Crank pin dia.

13 1/8"

Crank webs

Mid. length breadth

19 1/2"

Mid. length thickness

8"

Thickened parallel to axis

8"

Thickened around eye-hole

6"

Intermediate Shafts, diameter

as per Rule

11.986"

as fitted

12 1/2"

Thrust shaft, diameter at collars

as per Rule

12.585"

as fitted

13 1/8"

Tube Shafts, diameter

as per Rule

13.44"

as fitted

14 1/8"

Screw Shaft, diameter

as per Rule

22.6/32"

as fitted

14 1/8"

Is the

tube

screw

shaft fitted with a continuous liner

Yes.

Bronze Liners, thickness in way of bushes

as per Rule

3/4"

as fitted

3/4"

Thickness between bushes

as per Rule

23/32"

as fitted

23/32"

Is the after end of the liner made watertight in the

propeller boss

Yes.

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

(one length)

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.

Is an approved Oil Gland or other appliance fitted at the after end of the tube

shaft

No.

If so, state type

mean

Length of Bearing in Stern Bush next to and supporting propeller

4'-8 3/4"

Propeller, dia.

14'-6"

Pitch

14'-0"

No. of Blades

4.

Feed Pumps worked from the Main Engines, No.

Two

Diameter

3 1/4"

Stroke

26"

Can one be overhauled while the other is at work

Yes.

Bilge Pumps worked from the Main Engines, No.

Two

Diameter

3 1/4"

Stroke

26"

Can one be overhauled while the other is at work

Yes.

Feed Pumps

No. and size

2 weirs 4' x 9 1/2" x 21"

How driven

Steam

Pumps connected to the

Main Bilge Line

No. and size

one 9' x 11" x 10"

How driven

Steam.

Ballast Pumps, No. and size

No.

Lubricating Oil Pumps, including Spare Pump, No. and size

None.

Are two independent means arranged for circulating water through the

Oil Cooler

Yes.

Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room

3 @ 2 1/2" in E.R.

2 @ 2" in Tunnel

In Holds, &amp;c.

N°1 Hold. 2" p.r.s.

N°2 Hold. 3" p.r.s.

N°3 Hold. 3" p.r.s.

N°4 Hold. 2 1/2" p.r.s.

N°5 Hold. 3" p.r.s.

N°6 Hold. 3" p.r.s.

Main Water Circulating Pump Direct Bilge Suctions, No. and size

1 @ 5"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Yes.

Are all Sea Connections fitted direct on the skin of the ship

Yes.

Are they fitted with Valves or Cocks

Both.

Are the Overboard Discharges 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.

How are they protected

Wood casing.

Have they been tested as per Rule

Yes.

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Yes.

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

compartment to another

Yes.

Is the Shaft Tunnel watertight

Yes.

Is it fitted with a watertight door

Yes.

worked from

E.R. life saving.

MAIN BOILERS, &amp;c.—(Letter for record

S.)

Total Heating Surface of Boilers

4484 sq. ft.

Which Boilers are fitted with Forced Draft

Two main Bhrs.

Which Boilers are fitted with Superheaters

Both main Bhrs.

No. and Description of Boilers

2 SR (Spt)

Working Pressure

220.

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

Yes.

IS A DONKEY BOILER FITTED?

Yes.

If so, is a report now forwarded?

Yes.

In the donkey boiler be used for domestic purposes only

No.

Are approved plans forwarded herewith for Shafting

Yes.

(If not state date of approval)

Main Boilers

Yes.

Auxiliary Boilers

Yes.

Donkey Boilers

Yes.

Superheaters

Standard NEM.

General Pumping Arrangements

Yes.

Oil fuel Burning Piping Arrangements

Yes.

SPARE GEAR.

Is the spare gear required by the Rules been supplied

Yes.

What the principal additional spare gear supplied

One C.I. Propeller, one Propeller Shaft, main Circulating pump

rings: top &amp; bottom end brasses &amp; piston rings. For Engine: top &amp; bottom end brasses &amp; piston rings, 2 main coils, safety valve springs, 1 donkey boiler safety valve spring, 1 spring for superheater safety valves, 12 Condenser tubes, 4 tubes for main boilers, 2 tubes for donkey boiler.

Poppet valve gear: H.P. 1 Valve, 1 Valve Spindle &amp; Bush, 1 Compression Spindle

Bush, 2 Springs &amp; 1 roller pin. M.P. Same as for H.P.

The foregoing is a correct description.

GEORGE CLARK (1938) LTD.

Archib. R. Berry.

Manufacturer.



© 2021

Lloyd's Register Foundation



1939. Apr. 21, 27. May. 3, 9, 15, 19, 23, 26, 31. June. 6, 8, 13, 16, 20, 23, 29, 30. July. 4, 7, 11, 18, 21  
 During progress of work in shops -- 25, 28. Aug. 7, 8, 9, 10, 11, 16, 17, 18, 21, 22, 24, 29, 31. Sep. 4, 5, 7, 8, 12, 14, 15, 18, 19, 22, 25, 26, 28, 29. Oct.  
 Dates of Survey while building During erection on board vessel -- 3, 6, 10, 12, 16.  
 Total No. of visits 57.

Date of writing Report  
 No. in Survey Register Book.  
 on the

Master  
 Engines made at  
 Boilers made at  
 Nominal Horsepower

MULTITUBULAR

Manufacturers

Total Heating Surface

No. and Description of

Tested by hydro

Area of Fire

Area of each

In case of damage

Smallest distance

Smallest distance

Largest internal

Thickness of

long. seams

Percentage of

Percentage of

Thickness of

Material

Length of

Dimensions

End plates

How are

Tube plates

Mean pitch

Girders to

at centre

in each

Tensile strength

Pitch of

Working

Thickness

Pitch of

Working

Diameter

Working

Diameter

Certificate to be sent to LLOYD'S REGISTER

The amount of Entry Fee ... £ 5 : - :  
 Special ... £ 48 : 14 :  
 Donkey Boiler Fee ... £ 9 : 4 :  
 Travelling Expenses (if any) £ : :  
 When applied for, 23 OCT 1939  
 When received, 13/11/39

*W. H. K. Rasmussen*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + LMC 10.35  
 Spl. FD CH



© 2021

Lloyd's Register Foundation