

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 81896

Date of writing Report 17 Oct 1927

When handed in at Local Office 7 Oct 1927

Received at London Office

10 OCT. 1927

NEWCASTLE-ON-TYNE

No. in Survey held at Walker Thistlethwaite

Date, First Survey 4 May

Last Survey 29 Sept 1927

18814 on the STEEL SCREW STEAMER "PRUNUS" ex. M.V. CITY OF STOCKHOLM

(Number of Visits 54)

Built at Glasgow

By whom built Barclay Curle & Co. Ltd.

Yard No.

Gross 5075

Net 3155

When built 1925-8

Engines made at Walker on Tyne

By whom made Swan Hunter & Wigham

Engine No. 1246

when made 1924. 9

Boilers made at Walker on Tyne

By whom made Swan Hunter & Wigham

Boiler No. 1246

when made 1924. 9

Registered Horse Power

Owners Venatus Shipping Coy. Ltd.

Port belonging to London

Nom. Horse Power as per Rule 504

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

Trade for which Vessel is intended General.

ENGINES, &c.—Description of Engines Steam Reciprocating Triple Expansion

Dia. of Cylinders 25-42-70

Length of Stroke 48

No. of Cylinders 3

Revs. per minute

Crank shaft, dia. of journals

as per Rule 13.86

Crank pin dia. 14 1/8

Crank webs

Mid. length breadth 21 1/2

No. of Cranks 3

Thickness parallel to axis 8 3/4

Intermediate Shafts, diameter

as per Rule 13.19

as fitted 13 1/2

Thrust shaft, diameter at collars

as per Rule 13.86

as fitted 14 7/8

Tube Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule 14.6

as fitted 15 1/8

Is the screw shaft fitted with a continuous liner

Yes

Bronze Liners, thickness in way of bushes

as per Rule 7.46

as fitted 25/32

Thickness between bushes

as per Rule 5.58

as fitted 33/32

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

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

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

end of the tube shaft No Special Appliance

Length of Bearing in Stern Bush next to and supporting propeller

Diameter 4 1/2

Total Developed Surface 93 1/2

Feed Pumps worked from the Main Engines, No. 2

Diameter 4

Stroke 26

Can one be overhauled while the other is at work

Yes

Bilge Pumps worked from the Main Engines, No. 2

Diameter 4 1/4

Stroke 26

Can one be overhauled while the other is at work

Yes

Feed Pumps

No. and size two 1 1/2 x 7 x 2 1/2

How driven steam

Pumps connected to the Main Bilge Line

No. and size 2 1/4 x 1 1/4 and 1 Ballast pump 8 x 10 x 10

How driven steam

Ballast Pumps, No. and size 8 x 10 x 10

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

Are two independent means arranged for circulating water through the Oil Cooler

Bilge Pumps;—In Engine and Boiler Room ER 2 of 2 1/2

Stokehold 2 of 2 1/2

1-2 1/2 Tunnel well

In Holds, &c. No. 1 Hold 2 of 3 1/2

No. 2. 2 of 3 1/2

No. 3 Hold 2-3 1/2

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 of 8

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 1 of 5

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

Yes

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 fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Yes

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

Forward Suctions

How are they protected Casing

Have they been tested as per Rule

Yes

What pipes pass through the deep tanks

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

MAIN BOILERS, &c.—(Letter for record S)

Total Heating Surface of Boilers

Is Forced Draft fitted

Yes

No. and Description of Boilers 3 S.E. Cyl. Multitubular

Working Pressure 200 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting

No

(If not state date of approval)

Main Boilers Yes

Auxiliary Boilers none

Donkey Boilers none

Superheaters none

General Pumping Arrangements

Yes

Oil fuel Burning Piping Arrangements

Yes

SPARE GEAR. State the articles supplied:—

Two top end bolts and nuts, two bottom end bolts and nuts

two main bearing bolts and nuts

Set of Coupling bolts and nuts

Spare piston Rings for each piston

Spare feed and Bilge

Spare Tail Shaft

Spare Propeller (Bronze)

Set piston bolts & screw plugs

one cylinder escape valve spring

one connecting Rod top end braces

one bottom end braces

one eccentric

top complete one and pump Rod

3 air pump valves

one set of valves seats for general use

oil transfer pumps

Harlow feed pump

Sanitary pumps and Ballast pumps

General Spare tubes and ferrules

Spare fire bars

Spare tubes for boiler (2)

General Engine Room stores and tools

The foregoing is a correct description,

SWAN, HUNTER & WIGHAM, RICHARDSON, LTD.

J. Parkinson

Director

Manufacturer.

© 2021

Lloyd's Register

Foundation

12117-0062

1927
During progress of work in shops - - -
Dates of Survey while building
During erection on board vessel - - -
Total No. of visits 54.

MAY. 4. 17. 18. 20. 23. 24. 30. JUNE. 2. 8. 9. 13. 15. 17. 20. 27. 28. 29. JULY. 2. 5. 6. 7. 8. 11. 12. 14. 18. 20. 25. 26. 27. 28. 29. AUGUST. 8. 9. 11. 15. 17. 18. 19. 22. 23. 25. 26. 29. SEPT. 6. 7. 12. 14. 15. 16. 20. 22. 23. 29.

40 cylinders, valves tested hydraulic pressure 250 lb. 12 July 27 - Evaporator safety valve adjusted under steam 20 lb.
Dates of Examination of principal parts - Cylinders 28/6/27. 6.7.27. Slides 2.7.27. 6.7.27 Covers 6.7.27
Pistons 6.7.27. Piston Rods 29.6.27. 6.7.27 Connecting rods 29.6.27/6.7.27
Crank shaft July. 27. 14.7.27 29.8.27 Thrust shaft 27.6.27. 6.7.27. 16.7.27 Intermediate shafts 27.6.27. 11.7.27 29.8.27
Tube shaft 11.7.27 Screw shaft 16/6/27. 25/5.27. 28/9/27 Propeller 8.7.27 Lloyd's 181. MR. L.L.
Stern tube 29.6.27 Engine and boiler seatings 8.7.27. 29.8.27 Engines holding down bolts 29.8.27 Lloyd's 15612 D. MR.
Completion of pumping arrangements 22.9.27. Boilers fixed 29.8.27 Engines tried under steam 22.9.27
Main boiler safety valves adjusted 22.9.27 Thickness of adjusting washers ST. B. 7/32 a 5/16 - C.B. 7/8 a 3/2
Crank shaft material steel Identification Mark L.G.S Thrust shaft material steel Identification Mark L.G.S
Intermediate shafts, material steel Identification Marks L.G.S Tube shaft, material Identification Mark
Screw shaft, material steel Lloyd's 159. MR. 25. 5.27/407/L.G.S Test pressure 600 lb. Date of Test 25.8.27
Is an installation fitted for burning oil fuel. fitted for oil/coal. Is the flash point of the oil to be used over 150°F. Yes.
Have the requirements of the Rules for carrying and burning oil fuel been complied with. Yes
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 original Diesel type machinery together with auxiliaries, & donkey Boilers & other appurtenances removed from the vessel, the vessel subsequently altered for steam Reciprocating Engines & auxiliaries Boilers -
The new (steam) Engines and Boilers built under Special Survey, the material and workmanship found good and efficient.
The machinery satisfactorily installed on board the vessel, Tested under steam under working conditions (vessel at moorings) and found satisfactory -
In my opinion this vessel is now eligible for the notation of + L.M.C. 9.27 (in Red) made in the Register Book, and particulars appertaining to steam Reciprocating machinery as set forth in reports - FINE and B. 9.27. (in Red) New Tail Shaft (C.L) 9.27 Fitted for burning oil fuel 9.27. Flash point above 150°F.

Certificate to be sent to Newcastle-on-Tyne
The Surveyors are requested not to write on or below the space for Committee's Minute(s)

The amount of Entry Fee ... £ 6 :
Special ... £ 100 : 4
Donkey Boiler Fee ... £ :
Travelling Expenses (if any) £ :
When applied for, 23 Sept 1927
When received, 26 Sept 1927

L. G. Shallcross,
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 14 OCT 1927
Assigned See Minute on Inve. Rpt
81896 attached