

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office MAY 29 1940

Date of writing Report 10 When handed in at Local Office 25 MAY 1940 Port of HULL

No. in Survey held at Hull Date, First Survey 29.3.40 Last Survey 12.5.1940
 Reg. Book. 39527 on the "EMPIRE SUCCESS" ex "IRIA" (Number of Visits 31) Gross Tons 6009
 Net Tons 3646

Built at Hamburg By whom built Vulcan-Werke Yard No. 18 When built 1921

Engines made at Do. By whom made Do. Engine No. 1921 When made 1921

Boilers made at Do. By whom made Do. Boiler No. 1921 When made 1921

Registered Horse Power 820 Owners Ministry of Shipping Port belonging to London
 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes

Trade for which Vessel is intended General cargo to South Africa or such other use as may be required by Government.

LP Beam back turbine status fitted 1928

ENGINES, &c.—Description of Engines Reciprocating (triples) but now disconnected Revs. per minute 72

Dia. of Cylinders 31½, 52½, 84½ Length of Stroke 59½ No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals 17½ as per Rule 17½ Crank pin dia. 18.1 Mid. length breadth 28.5 Thickness parallel to axis 11.75
 as fitted 17½ Crank webs 1.8 shrunk Thickness around eye-hole 9

Intermediate Shafts, diameter 16½ as per Rule 16½ Thrust shaft, diameter at collars 17½ as fitted 17½ (see sketch)

Tube Shafts, diameter 27 as per Rule 27 Screw Shaft, diameter 19½ as per Rule 19½ Is the tube screw shaft fitted with a continuous liner Yes
 as fitted 27 as fitted 19½ (see sketch)

Bronze Liners, thickness in way of bushes 27 as per Rule 27 Thickness between bushes 19½ as per Rule 19½ Is the after end of the liner made watertight in the stern tube Yes
 as fitted 27 as fitted 19½ If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length.

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 Yes
 If so, state type Yes Length of Bearing in Stern Bush next to and supporting propeller 6' 0"

Propeller, dia. 20.75 Pitch 18.75 No. of Blades 4 Material Steel whether Moveable Yes Total Developed Surface 120 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 3.9 Stroke 27½ Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 4.75 Stroke 27½ Can one be overhauled while the other is at work Yes

Feed Pumps { No. and size 2 independent Weirs Pumps connected to the { No. and size 2 4 4.75 x 27.5 1 off 8.16.10
 How driven 12" x 22" x 9" (Steam) Main Bilge Line How driven M.E. Ind. duplex, steam.

Ballast Pumps, No. and size 1 duplex type 8", 16", 10" Lubricating Oil Pumps, including Spare Pump, No. and size 2 ind. Weirs (Steam)

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 In E.R. 5-4", 2-3½", 1-4¾". In B.R. 4-4"

In Pump Room ✓ In Holds, &c. 12-4", 1-4" in Cofferdam & 2-2½"

Main Water Circulating Pump Direct Bilge Suctions, No. and size one 15" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-3½"

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 they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Overboard Discharges above or below the deep water line Both

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 pass through the bunkers Breakers for bilge suction How are they protected Woods + steel plate covers

What pipes pass through the deep tanks ✓ Have they been tested as per Rule ✓

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 top of E.R.

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 11,970 sq. ft.

Which Boilers are fitted with Forced Draft All Which Boilers are fitted with Superheaters All

No. and Description of Boilers 4 SE Multitubular Working Pressure 206 lb.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No

If so, is a report now forwarded? ✓

Can the donkey boiler be used for domestic purposes only ✓

PLANS. Are approved plans forwarded herewith for Shafting ✓ Main Boilers ✓ Auxiliary Boilers ✓ Donkey Boilers ✓

(If not state date of approval)

Superheaters ✓ General Pumping Arrangements ✓ Oil fuel Burning Piping Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied Scamschaft (ex), 9 coupling bolts & nuts, Thompson coupling, 6 propeller studs, 1 set thrust pads, 1 bottom end brass, 1 pair crosshead brasses, ½ eccentric strap, ½ main bearing, 1 air pump rod, 1 set HP packings, 1 set drag links.

The foregoing is a correct description.

Manufacturer.



© 2019

Lloyd's Register Foundation

008608-008617-0242

During progress of work in shops --

During erection on board vessel --

Total No. of visits

1940. MAR. 29, 30. APR. 1, 2, 3, 4, 5, 6, 9, 12, 15, 16, 17, 18, 20, 22, 23, 24, 25, 26, 30. MAY. 1, 2, 3, 6, 7, 8, 9, 10, 11, 12.

31.

Dates of Examination of principal parts—Cylinders 1940 ap my Slides 1940 ap my Covers 1940 ap my

Pistons 1940 ap my Piston Rods Connecting rods

Crank shaft Thrust shaft Intermediate shafts

Tube shaft Screw shaft 5.4.40 Propeller 5.4.40

Stern tube 5.4.40 Engine and boiler seatings 1940 ap my Engines holding down bolts 1940 ap my

Completion of fitting sea connections

Completion of pumping arrangements 12.5.40 Boilers fixed ✓ Engines tried under steam 12.5.40

Main boiler safety valves adjusted 10.5.40 Thickness of adjusting washers ✓

Crank shaft material Steel Identification Mark Thrust shaft material Steel Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material ✓ Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material Steel Test pressure Date of Test

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 the Rules for the use of oil as fuel been complied with ✓

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No If so, have the requirements of the Rules been complied with ✓

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with Yes

Is this machinery duplicate of a previous case If so, state name of vessel Similar to S.S. Bochum

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

The particulars of the engines and dimensions of their various parts have been checked as far as practicable and found to agree substantially with first entry report on S.S. Bochum.

The workmanship and materials appear good.

The Baum-Wach turbine shaft is broken and turbine is out of use.

The machinery has been tried under working conditions and found satisfactory and is eligible in my opinion to be classed in the Register Book with LMC 5.40 on completion also

FO & CL.

The amount of Entry Fee ... £ : : When applied for, see in Bill 30.5.40
Special (Inclusion £2) £38 : - :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : When received, 6th July 1940

W.S. Shields & P. A. C. J. Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI, 21 JUN 1940

Assigned

No action 26 50675
see 30th 26



© 2019

Lloyd's Register Foundation