

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19 When handed in at Local Office 13 July 1943 Port of Sunderland

No. in Survey held at Sunderland Date, First Survey Nov. 17 Last Survey July 11 1943
Reg. Book (Number of Visits 20)

on the "EMPIRE BARDOLPH" Tons { Gross 7017
Net 4758

Built at Sunderland By whom built Short Bros. Ld. Yard No. 444 When built 1943

Engines made at Wallsend By whom made H. E. Massey Eng. Ld. Engine No. 3031 When made
(Main) Wallsend Slipway & Eng. Ld.
Boilers made at Wallsend By whom made H. E. Massey Eng. Ld. Boiler No. 3031 When made
(Aux.) H. E. Massey Eng. Ld.

Registered Horse Power 534 Owners Ministry of War Transport Port belonging to Sunderland

Nom. Horse Power as per Rule 534 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes

Trade for which vessel is intended

ENGINES, &c.—Description of Engines

Dia. of Cylinders Length of Stroke No. of Cylinders No. of Cranks Revs. per minute

Crank shaft, dia. of journals as per Rule Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis
as fitted Mid. length thickness Thickness around eye-hole

Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collars as fitted
as fitted

Tube Shafts, diameter as per Rule Screw Shaft, diameter as fitted Is the { tube } shaft fitted with a continuous liner {
as fitted

Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as fitted Is the after end of the liner made watertight in the
as fitted propeller boss.

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

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
at If so, state type

Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of Blades Material whether Moveable Total Developed Surface sq. feet

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

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

Feed { No. and size Pumps connected to the { No. and size
Pumps } How driven Main Bilge Line } How driven

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

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

Suctions, connected to both Main Bilge Pumps and Auxiliary
Bilge Pumps:—In Engine and Boiler Room 2 @ 3" W.E.R. 2 @ 3" B.R. 2 1/2" Jammed bell.
In Pump Room N° 5 3" φ r.s. N° 6 3" φ r.s. In Holds, &c. N° 1 3" φ r.s. N° 2 3" φ r.s. N° 3 3" φ r.s.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 8" Independent Power Pump Direct Suctions to the Engine Room Bilges,
No. and size 1 @ 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 they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plate Yes Are the Overboard Discharges 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 pass through the bunkers In hold bilge Suctions How are they protected Wood casings

What pipes pass through the deep tanks none 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 (Blocked) interior

MAIN BOILERS, &c.—(Letter for record

Total Heating Surface of Boilers 4868 sq. ft.

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

No. and Description of Boilers (See Nwe Rpt 100846) Working Pressure 220 lb.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes (Nwe Rpt. 100846)

IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes (Nwe Rpt 100846)

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

The foregoing is a correct description.

Arch. J. Berry
DIRECTOR & GENERAL MANAGER

Manufacturer.



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Lloyd's Register
Foundation

003391-003400-0294

During progress of work in shops - 1942. Jan. 17. 24. Dec. 17. 22. 23. 27. 1943. Jan. 6. 8. 11. 22. 28. Feb. 2. 3. 5. 8. 12. 15. 18. 22. March 11.
Dates of Survey while building -
During erection on board vessel - - -
Total No. of visits - 20

Dates of Examination of principal parts - Cylinders - Slides - Covers -
Pistons - Piston Rods - Connecting rods -
Crank shaft - Thrust shaft - Intermediate shafts -
Tube shaft - Screw shaft - Propeller -
Stern tube - Fitted 24/11/42 Engine and boiler seatings - 28/12/42. Engines holding down bolts - 11/1/43.
Completion of fitting sea connections - 24/11/42
Completion of pumping arrangements - 20/2/43 Boilers fixed - 23/12/42 Engines tried under steam - 18/2/43.
Main boiler safety valves adjusted - 18/2/43. Thickness of adjusting washers - P. Bl. P. 3/8" S. 7/16" 5/16" 1/2" 5/8" 3/4" 7/8" 1" 1 1/8" 1 1/4" 1 1/2" 1 3/4" 2" 2 1/4" 2 1/2" 2 3/4" 3" 3 1/4" 3 1/2" 3 3/4" 4" 4 1/4" 4 1/2" 4 3/4" 5" 5 1/4" 5 1/2" 5 3/4" 6" 6 1/4" 6 1/2" 6 3/4" 7" 7 1/4" 7 1/2" 7 3/4" 8" 8 1/4" 8 1/2" 8 3/4" 9" 9 1/4" 9 1/2" 9 3/4" 10" 10 1/4" 10 1/2" 10 3/4" 11" 11 1/4" 11 1/2" 11 3/4" 12" 12 1/4" 12 1/2" 12 3/4" 13" 13 1/4" 13 1/2" 13 3/4" 14" 14 1/4" 14 1/2" 14 3/4" 15" 15 1/4" 15 1/2" 15 3/4" 16" 16 1/4" 16 1/2" 16 3/4" 17" 17 1/4" 17 1/2" 17 3/4" 18" 18 1/4" 18 1/2" 18 3/4" 19" 19 1/4" 19 1/2" 19 3/4" 20" 20 1/4" 20 1/2" 20 3/4" 21" 21 1/4" 21 1/2" 21 3/4" 22" 22 1/4" 22 1/2" 22 3/4" 23" 23 1/4" 23 1/2" 23 3/4" 24" 24 1/4" 24 1/2" 24 3/4" 25" 25 1/4" 25 1/2" 25 3/4" 26" 26 1/4" 26 1/2" 26 3/4" 27" 27 1/4" 27 1/2" 27 3/4" 28" 28 1/4" 28 1/2" 28 3/4" 29" 29 1/4" 29 1/2" 29 3/4" 30" 30 1/4" 30 1/2" 30 3/4" 31" 31 1/4" 31 1/2" 31 3/4" 32" 32 1/4" 32 1/2" 32 3/4" 33" 33 1/4" 33 1/2" 33 3/4" 34" 34 1/4" 34 1/2" 34 3/4" 35" 35 1/4" 35 1/2" 35 3/4" 36" 36 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