

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19 10<sup>th</sup> June 1942 When handed in at Local Office NEWCASTLE-ON-TYNE Port of NEWCASTLE-ON-TYNE

No. in Survey held at Wallsend on Tyne Date, First Survey 24.9.41 Last Survey 28.5.1942  
Reg. Book. 6449 on the S.S. "EMPIRE. COLERIDGE" (Number of Visits 64)

Built at Sunderland By whom built Sir J. Laing & Sons (1938) Ltd Yard No. 741 When built 1942  
Engines made at Wallsend By whom made N.E. Marine Engd (1938) Ltd Engine No. 3021 When made 1942

Boilers made at " By whom made " Boiler No. 3021 When made 1942

Registered Horse Power " Owners Ministry of War Transport Port belonging to Sunderland  
Nom. Horse Power as per Rule 674 Is Refrigerating Machinery fitted for cargo purposes  Is Electric Light fitted yes

Trade for which Vessel is intended Carrying Petroleum in bulk

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute

Dia. of Cylinders 27-44-76 Length of Stroke 51 No. of Cylinders 3 No. of Cranks 3  
Crank shaft, dia. of journals as per Rule 15.2 as fitted 15 1/2 Crank pin dia. 16 Crank webs HP+LP 9 3/8" shrunk Mid. length breadth 2'-3 1/4 Thickness parallel to axis 9 7/8" 10 1/8"  
Mid. length thickness MP 10 1/8" Thickness around eye-hole 1 8 1/2" 7 8"

Intermediate Shafts, diameter as per Rule 14.48 as fitted 14 3/4 Thrust shaft, diameter at collars as per Rule 15.2 as fitted 15 3/4 at collar

Tube Shafts, diameter as per Rule " as fitted " Screw Shaft, diameter as per Rule 16 as fitted 16 1/4 Is the two screw shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule .79 as fitted 13/16 Thickness between bushes as per Rule .59 as fitted 13/16 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   
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 If so, state type " Length of Bearing in Stern Bush next to and supporting propeller 5'-5 1/4"

Propeller, dia. 18'-3" Pitch 14'-6" No. of Blades 4 Material Brass whether Moveable no Total Developed Surface 131 3/4 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 5" Stroke 27" Can one be overhauled while the other is at work   
Bilge Pumps worked from the Main Engines, No. 2 Diameter 5" Stroke 27" Can one be overhauled while the other is at work

Feed Pumps { No. and size 2 @ 12x9x24 1 @ 9x6x10 Pumps connected to the { No. and size 1 @ 10x12x12 2 @ 5x4x27  
How driven Steam Main Bilge Line How driven Steam M. Eng.

Ballast Pumps, No. and size 1 @ 10"x12"x12" 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 1 @ 3 1/2" Eng Rm P+S 1 @ 3 1/2" Eng Rm aft 1 @ 3 1/2" Boiler Rm P+S  
In Pump Room 4" P+S For 1 @ 2 1/2" In Holds, &c. 1 @ 2 1/2" P+S 1 @ 3" P+S to gutterways P+S  
to Transfer pump

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 10" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5" Are all the Bilge Suction Pipes in holds and tank 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 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 none How are they protected "  
What pipes pass through the deep tanks none 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  Is it fitted with a watertight door  worked from

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 10020  
Is Forced Draft fitted yes No. and Description of Boilers 3 SB Working Pressure 220

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes  
IS A DONKEY BOILER FITTED? no If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only   
PLANS. Are approved plans forwarded herewith for Shafting 9. 1. 40 Main Boilers 17. 2. 41 Auxiliary Boilers  Donkey Boilers   
(If not state date of approval) Similar Sessels

Superheaters 7. 4. 41 General Pumping Arrangements 20. 3. 41 Oil fuel Burning Piping Arrangements 21. 3. 41

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.

John Neill  
DIRECTOR

Manufacturer.



