

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

22 APR 1929

Date of writing Report 19. 4. 1929 When handed in at Local Office 19. 4. 1929 Port of MIDDLESBROUGH.

No. in Survey held at MIDDLESBROUGH Date, First Survey 9<sup>th</sup> Oct/28 Last Survey 18. 4. 1929

Reg. Book. 0327 Sup on the se. "GYPSUM EMPRESS" (Number of Visits)

Built at Hawerton Hill on Tees By whom built Furness S.B. Co Ltd. Yard No. 1444. Tons } Gross 4034.  
Net 2070.

Engines made at Middlesbrough By whom made Richardsons, Westgarth & Co. Engine No. 2578 when made 1929.

Boilers made at do. By whom made do. Boiler No. 2578. when made 1929.

Registered Horse Power Owners The Gypsum Packet Co. Ltd. Port belonging to Middlesbrough.

Nom. Horse Power as per Rule 408.6 409 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.

Trade for which Vessel is intended North American Coast

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 72.

Dia. of Cylinders 24½, 41, 68 Length of Stroke 45 No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 13 Crank pin dia. 13½ Crank webs Mid. length breadth 19½ Thickness parallel to axis 8" shrunk  
as fitted 13½ Mid. length thickness 8" Thickness around eye-hole 5¾

Intermediate Shafts, diameter as per Rule 12.37 Thrust shaft, diameter at collars as per Rule 13  
as fitted 12½ as fitted 14½

Tube Shafts, diameter as per Rule 13.76 Screw Shaft, diameter as per Rule 14½ Is the tube shaft fitted with a continuous liner Yes  
as fitted 13.76 as fitted 14½

Bronze Liners, thickness in way of bushes as per Rule 32 Thickness between bushes as per Rule 36 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 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 Yes Length of Bearing in Stern Bush next to and supporting propeller 4' 9½"

Propeller, dia. 16' 9" Pitch 16' 6" No. of Blades 4 Material Bronze Whether Moveable Yes Total Developed Surface 92 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 27" Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 3¾" Stroke 27" Can one be overhauled while the other is at work Yes

Feed Pumps No. and size 1-8½" x 5½" x 8" G.S. Duplex Pumps connected to the Main Bilge Line No. and size 1-5" x 4½" x 6" and 2-10" x 11" x 10" Duplex.  
How driven Steam How driven Steam

Ballast Pumps, No. and size 2-10" x 11" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size Yes

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 3-3"; 1-2" Stokehold Cofferdam; 2-3" Jawsa Bilge Well.

In Holds, &c. 2-2½" in Chamber; 2-2½" in No. 1 Hold Well.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-5½" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-3½" and 1-4½" for 1. Are all the Bilge Suction Pipes in holds and connected to the bilges 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 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

What Pipes pass through the bunkers none How are they protected Yes

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 none Is it fitted with a watertight door Yes worked from Yes

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 5712½

Is Forced Draft fitted Yes No. and Description of Boilers 2 S.B. Working Pressure 190 lbs.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? Yes

PLANS. Are approved plans forwarded herewith for Shafting 21. 9. 28 Main Boilers 7. 9. 28 Auxiliary Boilers Yes Donkey Boilers Yes

(If not state date of approval)

Superheaters Yes General Pumping Arrangements 20. 4. 26. Oil fuel Burning Piping Arrangements Yes

SPARE GEAR. State the articles supplied:—As per Rules + 2 Bronze Propeller Blades, 2 safety valve springs, 100 condenser tubes, 200 ferrules, 50 boiler tubes, 1 set Jawsa Heater Coils

For each auxiliary pump: 1 set valve & seats, 1 set bucket packing rings

The foregoing is a correct description.  
For RICHARDSONS, WESTGARTH & CO. LIMITED

*James Westgarth*  
MANAGING DIRECTOR.

Manufacturer.



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Lloyd's Register  
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W1164-0254



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Feb 7 13 20 21 22 28 Mar 1 2 4 6 7 8  
During erection on board vessel -- Mar 22 23 Apr 3 4 6 8 10 12 18  
Total No. of visits 42

Dates of Examination of principal parts—Cylinders 11- 1. 29 Slides 7. 2. 29 Covers 1. 11. 28.  
Pistons 5. 1. 29 Piston Rods 7. 2. 29 Connecting rods 20. 2. 29  
Crank shaft 5. 1. 29 Thrust shaft 28. 2. 29 Intermediate shafts 28. 2. 29.  
Tube shaft ✓ Screw shaft 28. 2. 29 Propeller 20. 2. 29.  
Stern tube 2. 3. 29 Engine and boiler seatings 1. 3. 29 Engines holding down bolts 3. 4. 29  
Completion of fitting sea connections 8. 3. 29  
Completion of pumping arrangements Boilers fixed 3. 4. 29. Engines tried under steam  
Main boiler safety valves adjusted 10. 4. 29. Thickness of adjusting washers Port 1/4" p 1/4" s. Star 9/32" p. 9/32" s.  
Crank shaft material Steel Identification Mark LLOYDS No 6452 H Thrust shaft material Steel Identification Mark LLOYDS No 9715  
Intermediate shafts, material Steel Identification Marks LLOYDS No 9585 Tube shaft, material Identification Mark LLOYDS No 9715  
Screw shaft, material Steel Identification Mark LLOYDS No 9135 Steam Pipes, material Steel Test pressure 600 lbs. Date of Test 3. 4. 29  
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 ✓  
Is this machinery duplicate of a previous case No If so, state name of vessel Gypoun Queen.

General Remarks (State quality of workmanship, opinions as to class, &c.)  
The materials and workmanship are good.  
This machinery has been built under special survey in accordance with the Rules and Approved Plan; it has been securely fitted aboard and tested under working conditions with satisfactory results and is, in my opinion, eligible for classification with record + L.M.C. 4. 29.

It is submitted that this vessel is eligible for THE RECORD. L.M.C. 4. 29. C.L.

Rm 25/4  
23. 4. 29  
J.

The amount of Entry Fee £ 5.0-0-0  
Special ... £ 86-7-0  
Donkey Boiler Fee ... £  
Travelling Expenses (if any) £  
When applied for, 20. 4. 1929  
When received, 25. 4. 29

Committee's Minute  
Assigned  
FRI. 26 APR 1929  
+ L.M.C. 4. 29  
C.L.

P. I. Man.  
Engineer Surveyor to Lloyd's Register of Shipping.