

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

- 2 AUG 1941

Date of writing Report 31/7/1941 When handed in at Local Office 31/7/1941 Port of WEST HARTLEPOOL

No. in Survey held at WEST HARTLEPOOL Date, First Survey 14th August 1940 Last Survey 29th July 1941
Reg. Book. on the S.S. "EMPIRE SEDGE" (Number of Visits 73)

Built at WEST HARTLEPOOL By whom built WM. GRAY & CO. LTD Yard No. 1117 Tons { Gross 2852.41
Net 1579.51

Engines made at WEST HARTLEPOOL By whom made CENTRAL MARINE ENG'RS Engine No. 1117 When made 1941

Boilers made at WEST HARTLEPOOL By whom made CENTRAL MARINE ENG'RS Boiler No. 1117 When made 1941

Registered Horse Power Owners MINISTRY OF WAR TRANSPORT Port belonging to WEST HARTLEPOOL

Nom. Horse Power as per Rule 255 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which Vessel is intended Ocean going

ENGINES, &c.—Description of Engines INVERTED TRIPLE EXPANSION Revs. per minute 80

Dia. of Cylinders 20" x 33" x 55" Length of Stroke 39" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 11" Crank pin dia. 11 1/2" Crank webs Mid. length breadth 16" Thickness parallel to axis 6 3/8" shrunk
as fitted 11 1/2" Mid. length thickness 6 3/8" Thickness around eye-hole 4 3/8"

Intermediate Shafts, diameter as per Rule 11" Thrust shaft, diameter at collars as per Rule 11" as fitted 11 1/2"

Tube Shafts, diameter as per Rule 11" Screw Shaft, diameter as per Rule 11 1/2" Is the { tube } shaft fitted with a continuous liner { screw } Yes

Bronze Liners, thickness in way of bushes as per Rule 6.57" Thickness between bushes as per Rule 4.92" 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 One length

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 4' 0"

Propeller, dia. 15' 3" Pitch 15' 6" No. of Blades 4 Material Cast Iron whether Moveable No Total Developed Surface 72 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 26" Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 1/2" Stroke 26" Can one be overhauled while the other is at work Yes

Feed Pumps { No. and size 2 @ 3" DIA x 26" 1 @ 8" x 6" x 15" SIMPLEX Pumps connected to the { No. and size 1 @ 10" x 11" x 10" 1 @ 8" x 6" x 15" 2 @ 3 1/2" DIA x 26" How driven MAIN ENGINE INDEPENDENT STEAM Main Bilge Line How driven INDEPENDENT STEAM MAIN ENGINE

Ballast Pumps, No. and size 1 @ 10" x 11" x 10" 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 3 @ 3" 1 @ 4" In Pump Room In Holds, &c. N°1. 2 @ 3 1/2" N°2. 2 @ 3" Boiler Room 2 @ 3" ENGINE ROOM 1 @ 3"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 6" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 4"

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 ON RESERVOIRS 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 MAIN BELOW REST 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 Bilge pipes How are they protected Wood ceiling

What pipes pass through the deep tanks N°1 Hold Bilge 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 Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 3530 sq ft

Which Boilers are fitted with Forced Draft Both Which Boilers are fitted with Superheaters None

No. and Description of Boilers Two single ended multibular Working Pressure 200 lbs/sq in.

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 Yes Main Boilers Yes 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 Spare propeller carried on board.

The foregoing is a correct description,
for THE CENTRAL MARINE ENGINE WORKS,

(Sd. J. H. Geary & Co. Ltd.)

Manufacturer.

J. H. Geary & Co. Ltd.
GENERAL MANAGER.

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Lloyd's Register
Foundation

059789-009795-0161

1940. Aug. 14. Sept. 6. Oct. 22. Nov. 4. 1941. Jan. 2. 14. 21. Feb. 4. 20. 26. March 11. 13. 19. 26. 28. April 1. 7. 10. 15. 15. 16. 18. 21. 22. 23. 24. 25. 28. 29. 30. May 6. 18. 19. 12. 13. 14. 15. 16. 20. 22. 23. 26. 27. 29. 30. June 3. 6. 7. 9. 10. 12. 13. 17. 19. 24. 27. July 2. 1941. May 12. 22. 27. 28. June 4. 13. 16. 18. 26. July 2. 4. 22. 23. 24. 29.

Dates of Survey while building

During progress of work in shops

During erection on board vessel

Total No. of visits 73

Dates of Examination of principal parts—Cylinders 11-3-41 - 3-6-41 Slides 26-5-41 Covers 26-5-41

Pistons 26-5-41 Piston Rods 26-5-41 Connecting rods 26-5-41

Crank shaft 16-5-41 - 6-6-41 Thrust shaft 22-5-41 - 6-6-41 Intermediate shafts

Tube shaft Screw shaft 29-5-41 - 12-6-41 Propeller 16-6-41

Stern tube 16-6-41 Engine and boiler seatings 28-5-41 Engines holding down bolts 26-6-41

Completion of fitting sea connections 28-5-41

Completion of pumping arrangements 22-7-41 Boilers fixed Engines tried under steam 23-7-41

Main boiler safety valves adjusted 22-7-41 Thickness of adjusting washers

Crank shaft material INHOT STEEL Identification Mark 5230 AEG. Thrust shaft material INHOT STEEL Identification Mark 5261 AEG.

Intermediate shafts, material NONE Identification Marks Tube shaft, material NONE Identification Mark

Screw shaft, material SCRAP IRON Identification Mark 1051H AEG. Steam Pipes, material SD STEEL Test pressure 600 lbs Date of Test 27-6-41

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

Is this machinery duplicate of a previous case Yes If so, state name of vessel S.S. "EMPIRE HURST", RTH 18162.

General Remarks (State quality of workmanship, opinions as to class, &c. See engines and boilers of this vessel have been built under special survey and in accordance with the approved plans and specification. The workmanship and materials have been found good. Upon completion they were examined under full working conditions and found satisfactory. It is recommended that the machinery of this vessel be classed in the Register Book of M.C. 7.41. 25B F.D. C.L.

The amount of Entry Fee ... £ 4 : 0 : When applied for,

Special ... £ 63 : 5 : 19

SUPERVISION Donkey Boiler Fee ... £ 15 : 16 : When received,

Travelling Expenses (if any) £ : : 19

Committee's Minute FRI. 8 AUG 1941 + Lmb. 7.41 Assigned 22. C.L.

Arthur W. Oxford, Engineer Surveyor to Lloyd's Register of Shipping.