

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 24 MAY 1943

Writing Report 1943. 5 When handed in at Local Office 1943. 5 Port of HULL

Survey held at HULL Date, First Survey 30. 10. 42 Last Survey 9. 5. 19 43  
 (Number of Visits 59)

on the H.M. TRAWLER FUSILIER Tons { Gross 580  
 Net 182

at BEVERLEY By whom built Cos. Welton & Gemmell Ltd Yard No. 707 When built 1943

made at HULL By whom made Chas. D. Holmes Ltd Engine No. 1640 When made

made at HULL By whom made Chas. D. Holmes Ltd Boiler No. 1640 When made

Horse Power Owners THE ADMIRALTY Port belonging to

Power as per Rule 165 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

which vessel is intended Government Service

Description of Engines Triple Expansion CONTRACT. Revs. per minute 123

Cylinders 15", 25", 42" Length of Stroke 27" No. of Cylinders 3 No. of Cranks 3

as per Rule 8.37 Mid. length breadth 16 1/8" Thickness parallel to axis 5 1/2"

ft. dia. of journals as fitted 8 1/2" Crank pin dia. 8 1/2" Crank webs shrunk Mid. length thickness 5 1/2" Thickness around eye-hole 3 13/16"

ate Shafts, diameter as per Rule 7.97 Thrust shaft, diameter at collars as per Rule 8.37  
 as fitted 8 1/8" as fitted 8 1/2"

fts, diameter as per Rule NONE Screw Shaft, diameter as per Rule 8.867 Is the tube shaft fitted with a continuous liner Yes  
 as fitted NONE as fitted 9" as fitted screw

liners, thickness in way of bushes as per Rule .566 Thickness between bushes as per Rule .311 Is the after end of the liner made watertight in the  
 as fitted 19/32" as fitted 1/2" boss Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Continuous

er 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 -

ers 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 -

No If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 42"

, dia. 10'-9" Pitch 11'-0" No. of Blades 4 Material C.I. whether Moveable Solid Total Developed Surface 42 1/2 sq. feet

mps worked from the Main Engines, No. 2 Diameter 2 5/8" Stroke 16" Can one be overhauled while the other is at work Yes

mps worked from the Main Engines, No. 2 Diameter 2 5/8" Stroke 16" Can one be overhauled while the other is at work Yes

No. and size One 6" x 4 1/2" x 6" Duplex Pumps connected to the Main Bilge Line { No. and size One 7" x 5" x 6" Duplex

How driven Independent from How driven Independent from ALSO one 3" from Ejector.

Pumps, No. and size One 7" x 5" x 6" Duplex Lubricating Oil Pumps, including Spare Pump, No. and size NONE

independent means arranged for circulating water through the Oil Cooler NONE Suctions, connected to both Main Bilge Pumps and Auxiliary  
 pumps:—In Engine and Boiler Room Two @ 2" Dia One @ 3" Dia

mp Room In Holds, &c. One @ 2" Dia in each of the following Magazine  
 mess room Spirit room D.C. Stores & Forward Hold. and After peak.

Water Circulating Pump Direct Bilge Suctions, No. and size One 5" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 size One 3" Bilge Ejector (Beam) Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes

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

Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Cocks & valves

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

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

Pipes pass through the bunkers From Suctions How are they protected plated

pipes pass through the deep tanks - NONE Have they been tested as per Rule Yes

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

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  
 department to another Yes Is the Shaft Tunnel watertight - Is it fitted with a watertight door - worked from -

BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2551 sq. ft.

Boilers are fitted with Forced Draft Yes Which Boilers are fitted with Superheaters NONE

nd Description of Boilers One S.B. Working Pressure 225 lbs 10"

REPORT ON MAIN BOILERS NOW FORWARDED? Yes

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

the donkey boiler be used for domestic purposes only -

NS. Are approved plans forwarded herewith for Shafting 19-8-42 Main Boilers 29-5-42 Auxiliary Boilers - Donkey Boilers -  
 (If not state date of approval)

heaters - General Pumping Arrangements 21-7-42 Oil fuel Burning Piping Arrangements -

SPARE GEAR.

Water Carbs spare gear required by the Rules been supplied Yes

the principal additional spare gear supplied See attached list

- One Set Steam & Water piston Rings for all Auxiliaries
- 7 Rings & Springs for MP & LP Pistons
- Two Eccentric rods & Graps for Main Engines
- One Plummer Block
- 3 Main Engine Glands Escape Valve Springs

The foregoing is a correct description.  
 CHARLES D. HOLMES & CO., LTD.

W.R. Evans Manufacturer.



FUSILIER.

Dates of Survey while building

During progress of work in shops -- 1942. Oct. 30. Nov. 6, 13, 23, 25. Dec. 3, 14, 18, 21, 23, 24. 1943. Jan. 1, 4, 6, 13, 14, 15, 18, 19, 22, 23. Feb. 1, 5, 6, 12, 22, 24, 26. Mon. 1, 4, 5, 9, 10, 15, 16, 18. Apr. 5.

During erection on board vessel --- 1942 DEC 16 1943 JAN 13, 29 FEB 11 MAR 10, 19, 24, 26, 30, 31 APRIL 2, 8, 13, 16, 21, 28, 29, 30. MAY 4, 8, 9.

Total No. of visits 59.

Dates of Examination of principal parts—Cylinders 18/4/43. 29/4/43. 15/1/43. Slides 29/1/43. Covers 18/1/43. 29/1/43.

Pistons 12/2/43. 5/2/43. Piston Rods 29/4/43. Connecting rods 29/1/43.

Crank shaft 14-1-43. Thrust shaft 21/12/42. Intermediate shafts 4/1/43.

Tube shaft NONE. Screw shaft 3/12/42. Propeller 16/12/42.

Stern tube 16/12/42. Engine and boiler seatings 24-3-43. Engines holding down bolts 24-3-43.

Completion of fitting sea connections 16/12/42.

Completion of pumping arrangements 22/4/43. Boilers fixed 19.3.43. Engines tried under steam 22/4/43.

Main boiler safety valves adjusted 22/4/43. Thickness of adjusting washers P 3/8" S 1/2"

Crank shaft material F.I. Steel Identification Mark 1667 JS. Coupling 9054. Jamel 9056 CP. 29/4/43. Thrust shaft material F.I. Steel Identification Mark 9054.

Intermediate shafts, material F.I. Steel Identification Marks 9043. CP. 17-9-42. Tube shaft, material NONE Identification Mark ---.

Screw shaft, material F.I. Steel Identification Mark 9052. CP. 16-9-42. Steam Pipes, material Steel Test pressure 675 # Date of Test 13/4/43.

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 H.M.T. GRENADIER.

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

The Machinery of the Vessel has been constructed in accordance with the approved Admiralty plans, the Specification and the Society's Rules, of best materials, supplied by firms approved by the Society.

The Workmanship and Materials are good.

The Machinery and Auxiliaries have been fitted aboard and when tried Steam at a bear full power as practicable in the basin, were found satisfactory in every respect.

The Vessel is eligible, in our opinion, when classed to have the records \* LMC 5,43 and T.S.(CL) and Notation T.3 cy. 15", 25", 42" - 165 NHP. 225 lbs. 15B. 3 cf. G.S. 64. H.S. 2551 FD.

Certificate to be sent to (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee	£ 4	—	When applied for, 21 MAY 1943
Special	£ 40	—	
Specification Smp.	£ 41	—	
Donkey Boiler Fee	£		When received, 19.
Travelling Expenses (if any)	£		

J. P. ... W. Shields  
Engineer Surveyor to Lloyd's Register of Shipping

FRI. 28 MAY 1943

Committee's Minute

Assigned

+ LMC 5.43  
FD CL



© 2020

Lloyd's Register Foundation