

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 30th March 1934 When handed in at Local Office 3rd April 1934 Port of West Hartlepool

No. in Survey held at West Hartlepool Date, First Survey 22nd September, 1936 Last Survey 25th March 1934

Reg. Book Supp. 88273 on the Single Screw Steamer "FELLDENE" (Number of Visits 60) Tons { Gross 4260 Net 2618

Built at West Hartlepool By whom built William Gray & Co Ltd Yard No. 1074 When built 1937

Engines made at West Hartlepool By whom made Central Mar. Eng. Works Engine No. 1074 When made 1937

Boilers made at West Hartlepool By whom made Central Mar. Eng. Works Boiler No. 1074 When made 1937

Registered Horse Power _____ Owners Felldene Shipping Co Ltd Port belonging to London

Nom. Horse Power as per Rule 289 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 Triple Expansion Revs. per minute 60
 Dia. of Cylinders 21", 33 1/2", 58 Length of Stroke 42" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 11.65 Crank pin dia. _____ Crank webs Mid. length breadth 16 1/2" Thickness parallel to axis 7 1/4"
 as fitted 11.75 Mid. length thickness 7 1/4" Thickness around eye-hole 5 1/8"
 Intermediate Shafts, diameter as per Rule 11.09 Thrust shaft, diameter at collars as per Rule 11.65
 as fitted 11.25 as fitted 11.75
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 12.57 Is the { tube } shaft fitted with a continuous liner { _____ }
 as fitted _____ as fitted 13" as fitted { screw } _____
 Bronze Liners, thickness in way of bushes as per Rule 6.8" Thickness between bushes as per Rule 1 1/2" Is the after end of the liner made watertight in the
 as fitted 7.5" as fitted _____
 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 54"
 Propeller, dia. 17'-9" Pitch 16'-6" No. of Blades 4 Material Bronze whether Moveable No Total Developed Surface 94.8 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" x 26" - one, 8" x 6" x 18" Pumps connected to the { No. and size 2, 3 1/2" x 26" - one, 9" x 10 1/2" x 10"
 How driven Main Engines - Steam Main Bilge Line { How driven Main Engines - Steam
 Ballast Pumps, No. and size one, 9" x 10 1/2" 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 4 - 2 1/2" In Pump Room _____
 In Pump Room _____ In Holds, &c. Fore. 2 - 3 1/2" / 2 - 3"
Aft, 4 - 3" / 1 - 2 1/2" / 1 - 2"

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 1/2" 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 plates Yes Are the Overboard Discharges above or below the deep water line Level
 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 _____ 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 Yes Is it fitted with a watertight door Yes worked from top of engine room

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 4964 sq. ft.
 Is Forced Draft fitted No No. and Description of Boilers 2, single ended Working Pressure 200 lbs.
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 Yes Main Boilers Yes Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval)
 Superheaters Yes 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,
FOR THE CENTRAL MARINE ENGINE WORKS,

(W. Gray & Co, Ltd.)
J. H. Gray
GENERAL MANAGER

Manufacturer.



1936 Apr 22-25-28 Oct 6-9-14-20-22-26 Nov 11-12-25-26 Dec 3-8-15-16-17-23-30-31 1937 Jan 4-6-8-11-12-13-14
 During progress of work in shops - - 15-18-20-21-22-25-26-27-28-29 Feb 1-2-3-4-5-8-10-11-12
 Dates of Survey while building
 During erection on board vessel - - - 1937 Feb 15-16-17-18-25-27 Mar 2-3-8-10-12-25
 Total No. of visits 60.

Dates of Examination of principal parts—Cylinders 13-1-37. 17-2-37. Slides 17-2-37 Covers 17-2-37.
 Pistons 21-1-37. Piston Rods 25-1-37. Connecting rods 8-12-36. 30-12-36. 11-2-37.
 Crank shaft 17-12-36. 30-12-36. 29-1-37. 5-2-37. Thrust shaft 21-1-37. 5-2-37. Intermediate shafts 12-1-37. 11-2-37.
 Tube shaft ✓ Screw shaft 18-1-37. 25-1-37. 11-2-37. Propeller 16-2-37.
 Stern tube 16-2-37. Engine and boiler seatings 25-2-37. Engines holding down bolts 3-2-37.

Completion of fitting sea connections 11-2-37.
 Completion of pumping arrangements 12-3-37. Boilers fixed 3-3-37. Engines tried under steam 12-3-37. 25-3-37.
 Main boiler safety valves adjusted 12-3-37. Thickness of adjusting washers P. Blr. P+S 5/16. Spt 5/32. S. Blr. P+S 5/16. Spt 5/32.

Crank shaft material Steel Identification Mark 9021 J.D. Thrust shaft material Steel Identification Mark 9021 J.D.
 Intermediate shafts, material Steel Identification Marks 9021 J.D. Tube shaft, material ✓ Identification Mark

Screw shaft, material Steel Identification Mark 9021 J.D. Steam Pipes, material Steel Test pressure 600 lbs. Date of Test 18/2/37
 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 "Jordene" W. Hpl Report No 17566

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

These Engines & Boilers have been built and installed under Special Survey and in accordance with the approved plans. Upon completion they were examined under working conditions and found satisfactory.

The materials and workmanship have been found good.

It is Recommended that this vessel has record in the Register Book + LMC 3.37. C.L. 2 S.B (Spt).

The amount of Entry Fee ...	£ 4 : 0	When applied for,
Special ...	£ 68 : 9	6-4-1937
Donkey Boiler Fee ...	£ :	When received,
Travelling Expenses (if any) £	:	11-5-1937

F. Brooke Smith
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 13 APR 1937
 Assigned + LMC 3.37 Spt
 CL

