

Rpt. 4b

3 NOV 1958
Date of writing report 16.10.57. Received London 23 OCT 1967 Port MANCHESTER. No. 18060
Survey held at MANCHESTER. In shops 9. 5.8.57. 25.9.57.
No. of visits On vessel First date Last date

FIRST ENTRY REPORT ON INTERNAL COMBUSTION MACHINERY

No. in R.B. Name Fruit Carrying Vessel for Spain. Gross tons
Owners Corchio Hijos - S.A. Managers Port of Registry
Hull built at By Santander Companio Naviera SA. Yard No. 71. When
Main Engines made at Hazel Grove. By Mirrlees, Bickerton & Day Ltd. Eng. No. 51202. When 1957.
Gearing made at By
Donkey boilers made at By Blr. Nos. When
Machinery installed at By When

Particulars of restricted service of ship, if limited for classification

Particulars of vegetable or similar cargo oil notation, if required

Is ship to be classed for navigation in ice? Is ship intended to carry petroleum in bulk?
Is refrigerating machinery fitted? If so, is it for cargo purposes? Type of refrigerant
Is the refrigerating machinery compartment isolated from the propelling machinery space? Is the refrigerated cargo installation intended to be classed?

The following particulars should be given as fully and as clearly as possible. Where the answer is "No" or "None", say so! Ticks and other signs of doubtful meaning are not to be used. Where the wording is not applicable to the installation, a black line may be inserted. If the main engines have been constructed at another port and are covered by a separate report, the particulars given in that report need not be repeated below, but the port and report number should be stated.

No. of main engines One. No. of propellers One. Brief description of propulsion system Direct drive to propeller.

MAIN RECIPROCATING ENGINES. Licence Name and Type No. One KSSDMB Heavy Oil.

No. of cylinders per engine 8. Dia. of cylinders 15" stroke(s) 18" 2 or 4 stroke cycle 4. Single or double acting Single.

Maximum approved BHP per engine 1600. at 350. RPM of engine and 350. RPM of propeller.

Corresponding MIP 172 psi. (For DA engines give MIP top & bottom) Maximum cylinder pressure 1080 psi. Machinery numeral 320.

Are the cylinders arranged in Vee or other special formation? Vertical In Line. If so, number of crankshafts per engine

TWO STROKE ENGINES. Is the engine of opposed piston type? If so, how are upper pistons connected to crankshaft?

Is the exhaust discharged through ports in the cylinders or through valve(s) in the cylinder covers? No. and type of mechanically driven scavenge pumps or blowers per

engine and how driven

No. of exhaust gas driven scavenge blowers per engine Where exhaust gas driven blowers only are fitted, can the engine operate with one blower out of action?

Is a stand-by or emergency pump or blower is fitted, state how driven No. of scavenge air coolers Scavenge air pressure at full

power Are scavenge manifold explosion relief valves fitted?

FOUR STROKE ENGINES. Is the engine supercharged? Yes. Are the undersides of the pistons arranged as supercharge pumps? No. No. of exhaust gas driven blowers per

engine 1. No. of supercharge air coolers per engine 1. Supercharge air pressure 29HG. Can engine operate without supercharger? Yes.

TWO & FOUR STROKE ENGINES—GENERAL. No. of valves per cylinder: Fuel 1. Inlet 2. Exhaust 2. Starting 1. Safety 1.

Material of cylinder covers Cast Iron. Material of piston crowns Cast Iron. Is the engine equipped to operate on heavy fuel oil? No.

Lubricating medium for:—Cylinders Water. Pistons None. Fuel valves None. Overall diameter of piston rod for double acting engines

Is the rod fitted with a sleeve? Is welded construction employed for: Bedplate? No. Frames? No. Entablature? No. Is the crankcase separated from the

underside of pistons? No. Is the engine of crosshead or trunk piston type? Trunk. Total internal volume of crankcase 338 cu.ft. No. and total area of explosion relief

area 8-230 sq.in. Are flame guards or traps fitted to relief devices? No. Is the crankcase readily accessible? Yes. If not, must the engine be removed for

haul of bearings, etc? Is the engine secured directly to the tank top or to a built-up seating? How is the engine started? Compressed Air.

Can the engine be directly reversed? Yes. If not, how is reversing obtained?

Has the engine been tested working in the shop? Yes. How long at full power? 6 Hours.

CRANK & FLYWHEEL SHAFTING. Date of approval of torsional vibration characteristics of the propelling machinery system 4.7.57. State barred speed range(s), if imposed

Working propeller For spare propeller Is a governor fitted? Yes. Is a torsional vibration damper or detuner fitted to the shafting? No.

Are bearings positioned? Type No. of main bearings 9. Are main bearings of ball or roller

bearings Plain. Distance between inner edges of bearings in way of crank(s) 17 1/2". Distance between centre lines of side cranks or eccentrics of opposed piston engines

Crankshaft type: Built, semi-built, solid. (State which) Solid.

Diameter of journals 11 1/2". Diameter of crankpins Centre 10 1/2" with Side 3 3/8" hole. Breadth of webs at mid-throw 8". Axial thickness of webs 5.7/32".

Pin thickness, radial thickness around eyeholes Are dowel pins fitted? Crankshaft material Journals OH Steel. Approved 40 tpsi.

Webs Tensile strength

Diameter of flywheel 4'6". Weight 4250 lbs. Are balance weights fitted? No. Total weight Radius of gyration

Diameter of flywheel shaft Material Minimum approved tensile strength

Shaft: separate, integral with crankshaft, integral with thrustshaft. (State which)

6251.

A circular postmark from Mirreles, Bickerton & Day Ltd. The text around the top inner edge reads "MIRRELES, BICKERTON & DAY LTD." and the text around the bottom inner edge reads "HAZEL GROVE, NR. STOGBURY". In the center, the date "16 OCT 1957" is stamped. A handwritten signature, possibly "W. Green", is written across the date. To the right of the postmark, the word "Builder" is printed. The background of the page shows faint, large letters "L" and "R" and the text "Lloyd's Foundation".

GENERAL REMARKS

State if the machinery has been constructed and/or installed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship and give recommendations for classification, including any special notation to be assigned. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.

This heavy oil engine has been constructed under Special Survey and in accordance with the Rules, approved plans and Secretary's letters. The material is sound and free from defects. The workmanship is good. The engine, coupled to a dynamometer, was tested at the Engine Builders' Works under the following conditions of loading - 6 hours 100% engine rating 1/2 hour astern, governing, manoeuvring.

Attached hereto:- Con. Rod Cert. F.1756.
Crankshaft " Df.F.57/1344.
Thrust Shaft " F.4423.

L. v. Housley

Engineer Surveyor to Lloyd's Register of Shipping

PARTICULARS OF IDENTIFICATION MARKS (Including Port of origin) of important Forgings and Castings. (Copies of certificates should be forwarded with report.)

RODS 150 (1) 151 (1) 152 (2) 153 (1) 155 (1) 156 (1) 157 (1) LWH 8.8.57.

CRANKSHAFT OR ROTORSHAFT 50 JL DSF 28.6.57.

FLYWHEEL SHAFT

THRUSTSHAFT 2828 LWH 18.9.57.

GEARING

INTERMEDIATE SHAFTS

SCREW AND TUBE SHAFTS

PROPELLERS

OTHER IMPORTANT ITEMS

Is the installation a duplicate of a previous case?

If so, state name of vessel

Date of approval of plans for crankshaft 4.7.57.

Straight shafting

Gearing

Clutch

Separate oil fuel tanks

Pumping arrangements

Oil fuel arrangements

Cargo oil pumping arrangements

Air receivers

23/5703. 23/5995.

Donkey boilers

Dates of examination of principal parts:-

Fitting of stern tube

Fitting of propeller

Completion of sea connections

Alignment of crank shaft in main bearings 5.8.57

Engine checks & bolts

Alignment of gearing

Alignment of straight shafting

Testing of pumping arrangements

Oil fuel lines

Donkey boiler supports

Steering machinery

Windlass

Date of Committee

TUESDAY 11 NOV 1958

Decision

See Rpt. 1

Special Survey Fee

£122.0s.0d.

Expenses

£1.17s.6d.

Date when A/c rendered

18.10.57

