

REPORT ON OIL ENGINE MACHINERY

No. 161.

28 1938

Received at London Office

Date of writing Report 26-10-1938 When handed in at Local Office

Port of WINTERTHUR

No. in Survey held at WINTERTHUR.
Reg. Book.

Date, First Survey 30-9-37 Last Survey 24-10-1938

Number of Visits

Single
Twin
Triple
Quadruple

Screw vessel

MV. "KYLE FISHER"

Tons { Gross 608
Net -

Built at HEUSDEN

By whom built DE HAAN AND OERLEMANS Yard No. 205 When built 1938

Engines made at WINTERTHUR

By whom made SULZER BROS. Engine No. 23203 When made 1938

Donkey Boilers made at

By whom made Boiler No. When made

Brake Horse Power 500

Owners JAMES FISHER AND SONS LD. Port belonging to BARROW-IN-FURNESS.

Nom. Horse Power as per Rule 114

Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Trade for which vessel is intended

OIL ENGINES, &c.—Type of Engines SULZER SOLID INJECTION 2 or 4 stroke cycle 2 Single or double acting SINGLE

Maximum pressure in cylinders 860 LB/IN² Diameter of cylinders 290 mm. Length of stroke 500 mm. No. of cylinders 5 No. of cranks 5Mean Indicated Pressure 80 LB/IN² Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 325 mm. Is there a bearing between each crank YES

Revolutions per minute 300 Flywheel dia. 1040 mm. Weight 1600 Kg. Means of ignition COMPRESSION Kind of fuel used HEAVY OIL

Crank Shaft, { Solid forged dia. of journals as per Rule 175 mm. Crank pin dia. 190 mm. Crank Webs Mid. length breadth 300 mm. Thickness parallel to axis

{ Semi-built dia. of journals as fitted 190 mm. Crank Webs Mid. length thickness 95 mm. Thickness around eyehole

{ All built dia. of journals as fitted 190 mm. Intermediate Shafts, diameter as per Rule 175 mm. Thrust Shaft, diameter at collars as per Rule 129 mm.

Flywheel Shaft, diameter as fitted 190 mm. Tube Shaft, diameter as per Rule

Screw Shaft, diameter as per Rule Is the tube shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the

propeller boss 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 If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet

Method of reversing Engines DIRECT Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES Means of lubrication

FORCED Thickness of cylinder liners 21 mm. Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material YES If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Cooling Water Pumps, No. 1 D.A. 85 mm. X 160 mm. STROKE Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. 1 D.A. Diameter 85 mm. Stroke 160 mm. Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line { No. and Size How driven

Is the cooling water led to the bilges If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

arrangements

Ballast Pumps, No. and size Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 - GEAR WHEEL PUMP. 39 M³/HR.

Are two independent means arranged for circulating water through the Oil Cooler YES Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size:—In Machinery Spaces In Pump Room

In Holds, &c.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces

and from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes pass through the bunkers 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

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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

of a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Main Air Compressors, No. No. of stages Diameters Stroke Driven by

TARTING Auxiliary Air Compressors, No. 1 No. of stages 1 Diameters 95 mm. Stroke 300 mm. Driven by MAIN ENGINE

Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

That provision is made for first Charging the Air Receivers

Scavenging Air Pumps, No. 1 D.A. TANDEM Diameters 550 mm. & 450 mm. Stroke 300 mm. Driven by MAIN ENGINE

Auxiliary Engines crank shafts, diameter as per Rule as fitted Position

Are the Auxiliary Engines been constructed under special survey Is a report sent herewith

005337-005343-0161

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AIR RECEIVERS:—Have they been made under survey ☒ YES State No. of Report or Certificate DUSSELDORF 1497 + 1498

Is each receiver, which can be isolated, fitted with a safety valve as per Rule ☒ YES

Can the internal surfaces of the receivers be examined and cleaned ☒ YES Is a drain fitted at the lowest part of each receiver ☒ YES

Injection Air Receivers, No. ☒ Cubic capacity of each ☒ Internal diameter ☒ thickness ☒

Seamless, lap welded or riveted longitudinal joint ☒ Material ☒ Range of tensile strength ☒ Working pressure ☒ by Rules ☒ Actual ☒

Starting Air Receivers, No. 2 Total cubic capacity 1000 LITRES Internal diameter 465 mm. thickness 17.5 mm.

Seamless, lap welded or riveted longitudinal joint LAP WELDED Material S.M. STEEL Range of tensile strength ☒ Working pressure ☒ by Rules APPD 40 ATS 10 Actual 30 ATS ☒

IS A DONKEY BOILER FITTED? ☒ 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 8-7-38 Receivers 10-12-36 Separate Fuel Tanks ☒

Donkey Boilers ☒ General Pumping Arrangements ☒ Pumping Arrangements in Machinery Space ☒

Oil Fuel Burning Arrangements ☒

SPARE GEAR.

Has the spare gear required by the Rules been supplied ☒ YES

State the principal additional spare gear supplied SEE SEPARATE LIST.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops-- 30-9-37 TO 24-10-38 12 VISITS.
During erection on board vessel--
Total No. of visits

Dates of Examination of principal parts—Cylinders 3-10-38 Covers { 3-10-38 24-10-38 Pistons 16-11-37 Rods { 26-10-37 4-3-38 Connecting rods ☒

Crank shaft 3-10-38 Flywheel shaft ☒ Thrust shaft ☒ Intermediate shafts ☒ Tube shaft ☒

Screw shaft ☒ Propeller ☒ Stern tube ☒ Engine seatings ☒ Engines holding down bolts ☒

Completion of fitting sea connections ☒ Completion of pumping arrangements ☒ Engines tried under working conditions ☒ SHOP TRIAL 3-10-38

Crank shaft, Material S.M. STEEL Identification Mark PK 10014 P.K. 17-12-1937 Flywheel shaft, Material ☒ Identification Mark ☒

Thrust shaft, Material ☒ Identification Mark ☒ Intermediate shafts, Material ☒ Identification Marks ☒

Tube shaft, Material ☒ Identification Mark ☒ Screw shaft, Material ☒ Identification Mark ☒

Identification Marks on Air Receivers 1497 1498
L.S. 15-10-37 L.S. 15-10-37.

Is the flash point of the oil to be used over 150° F. ☒

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with ☒

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ☒ 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 ☒ If so, state name of vessel ☒

General Remarks (State quality of workmanship, opinions as to class, &c. This engine has been constructed under Special Survey in accordance with the requirements of the Rules the Secretary's letters, and the approved plans. Materials and workmanship are good. Full power trials of the engine in the shop were satisfactory. The engine has been despatched to Messrs. De Haan and Oerleman's Heusden for installation in the vessel.

The amount of Entry Fee .. £ 75.-
Special £ 75.-
Donkey Boiler Fee ... £ ☒
Travelling Expenses (if any) £ ☒

When applied for,

Monthly 19.
Account.
When received,

Committee's Minute

Assigned

TUE 6 JUN 1939

J.N. Buchanan
Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation