

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY

No. 19373

Received at London Office

JUL 1935

Date of writing Report 22nd June 1935 When handed in at Local Office 2.7.35 Port of Grimsby
No. in Survey held at Lincoln Date, First Survey 9th Sept. 1932 Last Survey 20th June 1935
Reg. Book. Number of Visits 31

on the Single Screw vessel Oil Tank Barge SEVERN TRAVELLER Tons Gross 92
Triple
Quadruple Net

Built at Bristol By whom built C. Hill & Co. Yard No. 232 When built 1935

Engines made at Lincoln By whom made Ruston & Hornsby, Ltd. Engine No. 175181 When made 1935

Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Brake Horse Power 120 Owners Severn & Canal carrying Co. Port belonging to Bristol

Nom. Horse Power as per Rule 24.9 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted Yes

Trade for which vessel is intended ✓ [Type - H.V.C.R.M.]

IL ENGINES, &c. Type of Engines Airless Injection, Cold Starting 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 650 lbs Diameter of cylinders 8" Length of stroke 10 3/4" No. of cylinders 4 No. of cranks 4
Mean Indicated Pressure 80 lbs

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 9 1/2" Is there a bearing between each crank Yes

Revolutions per minute 600 Flywheel dia. 2'-10" Weight 10 1/2 Cwts Means of ignition Compression Kind of fuel used Crude oil

Crank Shaft, dia. of journals as approved Crank pin dia. 4 3/4" Crank Webs Mid. length breadth 8" Thickness parallel to axis ✓
as fitted 6" Mid. length thickness 2 1/2" shrunk Thickness around eye-hole ✓

Flywheel Shaft, diameter as approved Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as approved
as fitted 6" 3-19 as fitted 3 1/2"

Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube shaft fitted with a continuous liner ✓
as fitted 3 1/2" as fitted 3 1/2" screw Yes

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
as fitted 13/32 as fitted 3" 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 Yes

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
No If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller 17 1/2

Propeller, dia. 44" Pitch 42" No. of blades 4 Material CI whether Moveable No Total Developed Surface ✓ sq. feet

Method of reversing Engines Reverse Gears Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication
Forced Thickness of cylinder liners 3/4" Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
non-conducting material water 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. one Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. one Diameter 2 1/2" Stroke 2 3/4" Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line { No. and Size one 2"
How driven off engine

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 one geared

Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size:—In Machinery Spaces 1-2 off engine In Pump Room small

In Holds, &c. 4" hand pump & cross pump 2" for peak 2 1/2" hand pump & copper pump

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-2" hand Rotary Hand pump

Are all the Bilge Suction pipes in Holds and Tanks well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces
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 platform plates Yes Are the Overboard Discharges above or below the deep water line 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 ✓

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 boiler workings 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 ✓

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

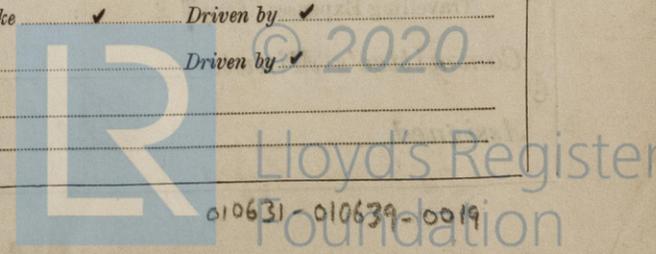
Main Air Compressors, No. one No. of stages one Diameters 3" Stroke 3 1/2" Driven by belt to main engine

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

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

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

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



25

30

AIR RECEIVERS:—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.

High Pressure Air Receivers, No. 1 Cubic capacity of each 11.2 Cub. ft. Internal diameter 24" thickness 5/16"

Seamless, lap welded or riveted longitudinal joint Seamless Material Sm. steel Range of tensile strength 24/30 tons Working pressure 300 lbs.

Starting Air Receivers, No. one Total cubic capacity 11.2 Cub. ft. Internal diameter 24" thickness 5/16"

Seamless, lap welded or riveted longitudinal joint Seamless Material Sm. steel Range of tensile strength 24/30 tons Working pressure 300 lbs.

IS A DONKEY BOILER FITTED? No

Is the donkey boiler intended to be used for domestic purposes only No

If so, is a report now forwarded? No

PLANS. Are approved plans forwarded herewith for Shafting 7.9.31.

(If not, state date of approval)

Receivers 30.11.34.

Separate Tanks ✓

Donkey Boilers ✓

General Pumping Arrangements ✓

Oil Fuel Burning 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,

Mr. R. Mions

Y.M.B. 1/1/35.

Manufacturer.

Dates of Survey while building	During progress of work in shops--	1932. Aug 2. 12. 22. 26. 30. Sep 26. Oct 3. 10. 13. 21. 28. Nov 11. 14. 16. 25. Dec 13.
	During erection on board vessel--	1935. June 28. July 1, 2, 3, 4, 6, 8, 10, 17. Aug 6.
	Total No. of visits	31 + 10 Total 41.

Dates of Examination of principal parts—Cylinders 8.4.35. Covers 13.5.35. Pistons 8.4.35. Rods ✓ Connecting rods 25.4.35.

Crank shaft 14.11.32. Flywheel shaft 14.11.32. Thrust shaft 29.5.35. Intermediate shafts ✓ Tube shaft ✓

Screw shaft 4.7.35. Propeller 4.7.35. Stern tube 1-7-35. Engine seatings 15-6-35. Engines holding down bolts 18-7-35.

Completion of fitting sea connections 1-7-35. Completion of pumping arrangements 17-7-35. Engines tried under working conditions 20.6.35.

Crank shaft, Material Sm. steel Identification Mark 3107 MCK. Flywheel shaft, Material Sm. steel Identification Mark 3107 MCK.

Thrust shaft, Material Sm. steel Identification Mark 1488 K.K. Intermediate shafts, Material ✓ Identification Marks ✓

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material SM. STEEL Identification Mark 2104

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

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 No. If so, state name of vessel ✓

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

The engines have been built under Special Survey in accordance with the Rules & Approved Plans.

Trials were carried out at the maker's works under brake load & all found satisfactory.

The engines are to be fitted on board a tanker barge, for The Severn & Canal Carrying Co. of Bristol.

This engine has now been fitted & secured in forward according to the Rules, & under working conditions found satisfactory.

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

See R.F.B. 10.2.34. Ref. 3720/P14/1104.

The amount of Entry Fee	£ 3 : 0 : 0	When applied for,	9 th Aug 1935
Special	...	When received,	26.9.35
Donkey Boiler Fee	charged in quarterly		
Travelling Expenses (if any)	£ :		

Committee's Minute

FRI. 30 AUG 1935

Assigned

See Brs. J.E. 13281

H. L. Silditch & Frank Goyne
Engineer Surveyor to Lloyd's Register of Shipping.



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Lloyd's Register Foundation

Rpt. 4c.

Date of writ

No. in Reg. Book.

Built at

Owners

Oil Engin

Generator

No. of Sev

OIL EN

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