

# REPORT ON OIL ENGINE MACHINERY.

Slid. No. 30483  
Stem No. 3284  
20 JUN 1930  
20 OCT 1930

Date of writing Report 18 June 1930 When handed in at Local Office 19 Port of Stockholm  
No. in Survey held at Sickla, Hem. Destr. Date, First Survey 24 March 1930 Last Survey 13 June 1930  
Reg. Book. Number of Visits 5

on the Single Motor VIGTIS Screw vessel Tons { Gross 6094 Net 3624  
Built at Sunderland By whom built J.L. Thompson & Co. Ltd Yard No. 577 When built 1920  
Engines made at Stockholm By whom made Abel. Alas Diesel Engine No. 80334 When made 1930  
Donkey Boilers made at \_\_\_\_\_ By whom made \_\_\_\_\_ Boiler No. \_\_\_\_\_ When made \_\_\_\_\_  
Brake Horse Power 100 Owners Messrs. William Doxford & Sons Ltd. Port belonging to Sunderland  
Nom. Horse Power as per Rule 46 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
Trade for which vessel is intended Oil Tanker

OIL ENGINES, &c.—Type of Engines Stationary Diesel Oil Engine (Type 2429) 2 or 4 stroke cycle Single or double acting  
Maximum pressure in cylinders 35 kg/cm<sup>2</sup> Diameter of cylinders 290 mm Length of stroke 410 mm No. of cylinders 2 No. of cranks 2  
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 984 mm Is there a bearing between each crank No  
Revolutions per minute 275 Flywheel dia. 1400 mm Weight 1185 kg Means of ignition Compression Kind of fuel used crude oil

Crank Shaft, dia. of journals 178 mm as per Rule 178 mm Crank pin dia. 195 mm Crank Webs Mid. length breadth 260 mm Thickness parallel to axis shrunk  
Flywheel Shaft, diameter as fitted Intermediate Shafts, diameter as fitted Thrust Shaft, diameter at collars as fitted  
Tube Shaft, diameter as fitted Screw Shaft, diameter as fitted Is the { tube { screw } shaft fitted with a continuous liner { \_\_\_\_\_

Bronze Liners, thickness in way of bushes as fitted Thickness between bushes as fitted 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 \_\_\_\_\_

Propeller, dia. \_\_\_\_\_ Pitch \_\_\_\_\_ No. of blades \_\_\_\_\_ Material \_\_\_\_\_ whether Moveable \_\_\_\_\_ Total Developed Surface \_\_\_\_\_ sq. feet  
Method of reversing Engines Yes Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication pumps  
Thickness of cylinder liners more fitted Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material \_\_\_\_\_  
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 Is the sea suction provided with an efficient strainer which can be cleared within the vessel \_\_\_\_\_  
Bilge Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
Pumps connected to the Main Bilge Line { No. and Size \_\_\_\_\_ How driven \_\_\_\_\_

Ballast Pumps, No. and size \_\_\_\_\_ 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, No. and size:—In Machinery Spaces \_\_\_\_\_  
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 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 \_\_\_\_\_  
Are all pipes pass through the bunkers \_\_\_\_\_ How are they protected \_\_\_\_\_  
Are all 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 \_\_\_\_\_

Are wood vessels, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork \_\_\_\_\_  
Are Air Compressors, No. more fitted No. of stages \_\_\_\_\_ Diameters \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
Are Auxiliary Air Compressors, No. \_\_\_\_\_ No. of stages \_\_\_\_\_ Diameters \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_

Are Air Pumps, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
Are Auxiliary Engines crank shafts, diameter as per Rule \_\_\_\_\_ as fitted \_\_\_\_\_  
Are Receivers:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule \_\_\_\_\_  
Are the internal surfaces of the receivers be examined \_\_\_\_\_ What means are provided for cleaning their inner surfaces \_\_\_\_\_

Are High Pressure Air Receivers, None fitted, solid injection Cubic capacity of each \_\_\_\_\_ Internal diameter \_\_\_\_\_ thickness \_\_\_\_\_  
Seamless, lap welded or riveted longitudinal joint \_\_\_\_\_ Material \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_

Are Starting Air Receivers, None ordered Total cubic capacity \_\_\_\_\_ Internal diameter \_\_\_\_\_ thickness \_\_\_\_\_  
Seamless, lap welded or riveted longitudinal joint \_\_\_\_\_ Material \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_



002071-002078-0010

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting *E 28.5.25*  
(If not, state date of approval)

Receivers *25.10.26*

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR as per list, approved on the 4th Febr. 1926, will be inspected when machinery is being fitted in ship.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building  
 During progress of work in shops - - *24 14 4 12 & 13 30*  
 During erection on board vessel - - *3 4 6*  
 Total No. of visits *in shop 5.*

Dates of Examination of principal parts—Cylinders *with* Covers *12 & 13 30* Pistons *13 30* Rods Connecting rods *24 12 & 13 30*  
 Crank shaft *14 4, 12, 13 30* 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 *in shop 12 30*  
 Crank shaft, Material *S. M. Steel* Identification Mark **LLOYD'S N: 45891 A.I. 4.6.30. A** 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

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

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *see Stem. report no. 3272.*

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

*I am of opinion that this engine is of superior material and workmanship, and as it has been designed and constructed under special survey, I have respectfully to submit that it be approved as auxiliary to a classed main engine.*

*This installation has been satisfactorily fitted in the vessel. For notation see machinery report.*

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

The amount of Entry Fee ... £	:	:	When applied for,
Special survey in shop <i>to 218:40</i>	:	:	<i>18.6. 19.30.</i>
Donkey Boiler Fee ... £	:	:	When received,
Travelling Expenses (if any) <i>£ 28:00</i>	:	:	<i>30.6. 19.30</i>

Committee's Minute *Cr. 246:40*  
**TUE. 28 OCT 1930**

Assigned

*Su. F. E. Rep.*

*Carlsson*  
 Carlsson  
 Engineer Surveyor to Lloyd's Register of Shipping.  
 Assisted by Mr. K. J. Andersson



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