

# REPORT ON OIL ENGINE MACHINERY.

Newcastle-on-Tyne 28814

No 2936

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of writing Report 4<sup>th</sup> April 1928 When handed in at Local Office

Port of Stockholm

in Survey held at Sickla, Skm. Distr.

Date, First Survey 27 May 1927 Last Survey 23 March 1928

Number of Visits 6

on the Single Twin Triple Screw vessels

MOTORSHIP

"JENNY"

Tons 4706  
Gross  
Net

at Newcastle

By whom built Swan, Hunter & Wigham

Yard No. 1252 When built 1928

ines made at Stockholm

By whom made Aktieb. Atlas-Diesel

Engine No. 80166 When made 1928

key Boilers made at

By whom made

Boiler No. When made

ke Horse Power 70

Owners Harry Borthen & Co., A.S.

Port belonging to Oslo

n. Horse Power as per Rule 34

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ENGINES, &c.—Type of Engines Diesel Oil Engine/type 2H25/ 2 or 4 stroke cycle Single or double acting

imum pressure in cylinders 35 Kg./cm.<sup>2</sup> No. of cylinders 2 Diameter of cylinders 250 mm. No. of cranks 2 Length of stroke 350 mm.

of bearings, adjacent to the Crank, measured from inner edge to inner edge 838 mm. Is there a bearing between each crank no

olutions per minute 300 Flywheel dia. 1200 mm. Weight 730 kg. Means of ignition Compression and of fuel used Crude oil

ank Shaft, dia. of journals 162 mm. as per Rule 170 " Crank pin dia. 164 mm. Crank Webs Mid. length breadth 430 mm. Thickness parallel to axis shrunk Thickness around eye-hole

flywheel is fitted on the crank shaft as fitted Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule

wheel Shafts, diameter as fitted Screw Shaft, diameter as fitted Is the tube screw shaft fitted with a continuous liner

Shafts, diameter as fitted Is the after end of the liner made watertight in the

ize 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

eller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

he 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

no liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after

of the tube shaft Length of Bearing in Stern Bush next to and supporting propeller

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

od of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication

umps Thickness of cylinder liners none fitted Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with

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

ng Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Pumps fitted to the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

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

st Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size

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

s, No. and size:—In Engine and Boiler Room

olds, &c.

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

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

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

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

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

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

at pipes pass through the bunkers How are they protected

at pipes pass through the deep tanks Have they been tested as per Rule

all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

he 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

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

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

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

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

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

avenging Air Pumps, No. Diameter Stroke Driven by

iliary Engines crank shafts, diameter as per Rule as fitted

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes

the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces mudhole 120 mm.

there a drain arrangement fitted at the lowest part of each receiver yes

gh Pressure Air Receivers, No. none fitted Cubic capacity of each Internal diameter thickness

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

irting Air Receivers, No. 1 Total cubic capacity 72 litres Internal diameter 240 mm. thickness 15,5 mm.

iless, lap welded or riveted longitudinal joint lapwelded Material S.M. Steel Range of tensile strength 36 kg./mm<sup>2</sup> Working pressure by Rules 71 kg./cm.<sup>2</sup>



*If so, is a report now forwarded?*

GENE

[illegible]

*The foregoing is a correct description,*

Manufacturer.

Dates of Examination of principal parts—Cylinders		with	Covers	<u>16</u> <u>17</u>	28	Pistons	<u>17</u> <u>28</u>	Rods	Connecting rods	<u>27</u> <u>21</u>
Crank shaft	<u>21</u> <u>27</u> <u>2</u> <u>16</u>	28	Flywheel shaft		Thrust shaft		Intermediate shafts		Tube shaft	<u>5</u> <u>11</u>
	<u>11</u>	<u>3</u>								
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				
Crank shaft, Material	<b>S.M. Steel</b>	Identification Mark	<b>LLOYD S</b> <b>N:o 5566</b> <b>AI.2.2.28A</b>	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  $150^{\circ} F$ .

*Is this machinery duplicate of a previous case* **yes** *If so, state name of vessel* **See Skm. report no. 2917.**

*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 appointed as auxiliary to a classed main engine.

*O. Thaxson*  
Engineer Surveyor to Lloyd's Register of Shipping.  
Assisted by Mr. L. J. Andersson

*Assigned*