

# REPORT ON OIL ENGINE MACHINERY

No. 132042

Received at London Office 21 SEP 1955

Survey Report 13-9-55 When handed in at Local Office 13-9-55 Port of LONDON

Survey held at STAMFORD Date, First Survey 13.6.55 Last Survey 6-9-55 Number of Visits 19

Single in the Twin Triple Quadruple Screw vessel "Stan Woodaway" Tons Gross Net

DEEST By whom built MESSRS. SCHEEPSWERF GEBR. V.D. WERF Yard No. 261 When built

de at STAMFORD By whom made BLACKSTONE & CO. LTD. Engine No. M65511 When made 1955

Boiler No. When made Port belonging to Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

as per Rule Owners Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

which vessel is intended NES, &c. Type of Engines EVMGR 6 2 or 4 stroke cycle 4 Single or double acting SINGLE

Pressure in cylinders 800 lb/sq. in. Diameter of cylinders 8 3/4" Length of stroke 11 1/2" No. of cylinders 6 No. of cranks 6

Rated Pressure 105 lb/sq. in. Ahead Firing Order in Cylinders 1.5.3.6.2.4 Span of bearings, adjacent to the crank measured

from to inner edge 10 1/16" Is there a bearing between each crank YES Revolutions per minute 600/30

Weight 1860 lbs. Moment of inertia of flywheel (lbs. in.² or Kg. cm.²) 5.45 Means of ignition COMP. Kind of fuel used DIESEL

dia. of journals as per Rule 5 1/8" as fitted 6 3/4" Crank pin dia. 1 6/8" Crank webs Mid. length breadth 7 3/4" Mid. length thickness 2 29/32" shrunk Thickness parallel to axis Thickness around eye-hole

Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

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

Thickness between bushes as per Rule as fitted Is the after end of the liner made watertight in the

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

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

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

Pitch No. of blades Material whether moveable Total developed surface sq. feet

Inertia of propeller (lbs. in.² or Kg. cm.²) Kind of damper, if fitted HYDRAULIC "ATLAS" TYPE FORD END OF CRANKSHAFT

Reversing Engines GEARBOX Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES Means of

Thickness of cylinder liners 19/32" Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled

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

Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel

worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

connected to the Main Bilge Line No. and size How driven

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

No. and size Power Driven Lubricating Oil Pumps, including spare pump, No. and size ONE - SCAVENGE - 1160 G.P.H. ONE - PRESSURE - 810 G.P.H.

Independent means arranged for circulating water through the Oil Cooler YES Suctions, connected to both main bilge pumps and auxiliary

No. and size:—In machinery spaces In pump room

Power Pump Direct Suctions to the engine room bilges, No. and size

Are the suction pipes in holds and tunnel well fitted with strum-boxes Are the bilge suction in the machinery spaces led from easily

boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Are they fitted with valves or cocks Are they fixed

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 the blow off cocks fitted with a spigot and brass covering plate

How are they protected

Have they been tested as per Rule

Are the cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times

Are the connections 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

Is the shaft tunnel watertight Is it fitted with a watertight door worked from

Are the means provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Compressors, No. No. of stages diameters stroke driven by

Air Compressors, No. No. of stages diameters stroke driven by

Is made for first charging the air receivers

Pumps, No. diameter stroke driven by

Are the crank shafts, diameter as per Rule as fitted No. Position

Have the engines been constructed under special survey Is a report sent herewith

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AIR RECEIVERS:—Have they been made under survey YES. State No. of report or certificate C19952 C20796, C

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, welded or riveted longitudinal joint. ✓ Material. ✓ Range of tensile strength. ✓ Working pressure by Rules. ✓  
Actual. ✓

Starting Air Receivers, No. 2 Total cubic capacity 22 CU. FT. Internal diameter. 2'-0" thickness. 3/8"  
ONE. 5 CU. FT. 1'-6" 7/16"

Seamless, welded or riveted longitudinal joint. SEAMLESS Material. STEEL Range of tensile strength. 24/30 T.T. Working pressure by Rules. ✓  
Actual. 300lb

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. YES. Receivers. DRG. NO 47 B342 Separate fuel tanks. 289/4.  
(If not, state date of approval)

Donkey boilers. ✓ General pumping arrangements. ✓ Pumping arrangements in machinery space. ✓

Oil fuel burning arrangements. ✓

Have Torsional Vibration characteristics been approved. ✓ YES. Date of approval. 26.8.55.

SPARE GEAR.

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

State the principal additional spare gear supplied. SEE LIST NO R19240 A/3-8. ATTACHED.

The foregoing is a correct description,  
R. G. Ganger for Blackstone & Co Ltd. Manufacturer.

Dates of Survey while building During progress of work in shops - 13.6.55, 6.9.55.

During erection on board vessel - - -

Total No. of visits.

Dates of examination of principal parts—Cylinders. 13.6.55 Covers. 13.6.55 Pistons. 13.6.55 Rods. ✓ Connecting rods. 13.6.55

Crank shaft. 13.6.55 Flywheel shaft. ✓ Thrust shaft. ✓ Intermediate shafts. ✓ Tube shaft. ✓

Screw shaft. ✓ Propeller. ✓ Stern tube. ✓ Engine seatings. ✓ Engine holding down bolts. ✓

Completion of fitting sea connections. ✓ Completion of pumping arrangements. ✓ Engines tried under working conditions. ✓

Crank shaft, material. O.H. STEEL Identification mark. JLS 13.6.55 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. R881. LLOYDS TEST. NOT. 700 LB. WP. 350 LB. 13.10.54. T.D.S.  
R951. LLOYDS TEST NOT. 700 LB. WP. 350 LB. 7.2.55 T.D.S., NO. A19448 LLOYDS TEST NOT. 600 LB. WP. 395 LB. TST. 4.11

Welded receivers, state Makers' Name.

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.

Description of fire extinguishing apparatus fitted.

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. STANDARD ENGINE. If so, state name of vessel.

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

This engine has been built under Special Survey in accordance with the Secretary's Letters, Approved Plans and Requirements of the Rules. Steel used in its construction has been made at works approved by the Committee. The workmanship is good. On completion, the engine was tested in the shops under full load and 10% overload conditions with satisfactory results. In my opinion, this engine is eligible to be fitted on board a vessel classed with this Society. Attached hereto is extract from Manchester Report No F932 for crankshaft.

LEED

The amount of Entry Fee ... £ 19 : 0 -

Special ... £ :

Donkey Boiler Fee... £ :

Travelling Expenses (if any) £ 4 : 10

Committee's Minute THURSDAY 15 MAR 1956

Assigned See Rpt. 4 R.

When applied for 19 SEP 1955

When received 19

J. Forrest-Robertson  
Engineer Surveyor to Lloyd's Register of Shipping

Lloyd's Register Foundation