

## REPORT ON OIL ENGINE MACHINERY.

No. 123547

Received at London Office

Writing Report 22/10/51. 19 When handed in at Local Office 22/10/51. 19 Port of London.

Survey held at Stamford Date, First Survey 2/10/51. Last Survey 14/10/51. 19

Number of Visits 2.

Single on the TWIN Triple Quadruple Screw vessel

Wivenhoe. By whom built James Cook (Wivenhoe) Ltd. Yard No. 1047 When built

made at Stamford By whom made Blackstone & Co Ltd Engine No. 49120 When made 10/51.

Boilers made at By whom made Boiler No. When made

orse Power 135 NHP Owners Port belonging to

ver as per Rule 22.5. 27 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

which vessel is intended

GINES, &c. — Type of Engines EYMG R. 3. 2 or 4 stroke cycle 4 Single or double acting Simple

pressure in cylinders 800 lb. Diameter of cylinders 8 3/4 Length of stroke 11 1/2 No. of cylinders 3 No. of cranks 3

icated. Pressure 108 lb. Ahead Firing Order in Cylinders 1. 2. 3. Span of bearings, adjacent to the crank, measured

er edge to inner edge 10 1/16 Is there a bearing between each cranks Yes. Revolutions per minute 600.

dia. 4 3/2 Weight 2800 lb. Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>) 82800 Means of ignition Compression Kind of fuel used Diesel

Solid forged dia. of journals as per Rule as approved 6 3/4 Crank pin dia. 6 1/8 Crank webs Mid. length breadth 4 3/4 Thickness parallel to axis

Semi built dia. of journals as fitted 6 3/4 Mid. length thickness 2 5/32 Thickness around eyehole

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

as fitted

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

as fitted

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

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

er 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

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

2/5 dia Pitch No. of blades Material whether moveable Total developed surface sq. feet

2/5 of inertia of propeller (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>) Kind of damper, if fitted

of reversing Engines S.L.M. Gov. Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes. Means of

Thickens of cylinder liners 19/32 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled

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

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

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

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

ling 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

ents

umps, No. and size Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1 Supply 810 GPH. 1 Suction 1160 GPH.

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

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

ec.

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

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

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

a Connections fitted direct on the skin of the Ship Are they fitted with valves or cocks Are they fixed

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

hach 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

is pass through the bunkers How are they protected

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

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

ngement 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

from one compartment to another Is the shaft tunnel watertight Is it fitted with a watertight door worked from

essel, what means are 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

ippin Air Compressors, No One No. of stages One diameters 1 7/8 stroke 2 driven by V.B.H.

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

ision is made for first charging the air receivers

g Air Pumps, No diameter stroke driven by

Engines crank shafts, diameter as per Rule No. Position

as fitted

uxiliary engines been constructed under special survey Is a report sent herewith



AIR RECEIVERS:—Have they been made under survey Yrs. State No. of report or certificate  
Is each receiver, which can be isolated, fitted with a safety valve as per Rule.  
Can the internal surfaces of the receivers be examined and cleaned. Is a drain fitted at the lowest part of each receiver.  
Injection Air Receivers, No. Cubic capacity of each Internal diameter thickness  
Seamless, welded or riveted longitudinal joint Material Range of tensile strength Working pressure  
Starting Air Receivers, No. 3 Total cubic capacity 15 cu. ft. Internal diameter 17 5/8 thickness 5/16  
Seamless, welded or riveted longitudinal joint Material Range of tensile strength Working pressure  
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. 4/8/47. Receivers Separate fuel tanks  
(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 To be submitted. Date of approval  
SPARE GEAR.  
Has the spare gear required by the Rules been supplied Yrs.  
State the principal additional spare gear supplied Spare gear list attached.

The foregoing is a correct description

BLACKSTONE & CO. LTD. R. Ganga. Manufacturer.

Dates of Survey while building During progress of work in shops - - 2/10/51. 17/10/51.  
During erection on board vessel - -  
Total No. of visits  
Dates of examination of principal parts—Cylinders 2/10/51. Covers 2/10/51. Pistons 2/10/51. Rods 2/10/51. Connecting rods 2/10/51.  
Crank shaft 15/11/50. 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 1908 WAC 15/11/50. 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 20135/11 G5. 23/11/50. 20135/23. G5. 12/2/51. 20135/28 G5. 12/2/51.  
Welded receivers, state Makers' Name L. Jenkins & Co Ltd.  
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 If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) This engine has been built under survey in accordance with plans approved and the requirements of the rules. Steel used in manufacture has been made at works approved by the Committee and tested in the presence of the Society's Surveyor. The engine has been tested at the maker's works on full load and overload with satisfactory results, the workmanship is good, and the engine in my opinion eligible to be fitted in a classed ship, subject to the torsional vibration characteristics being examined & found in order. The S.H.M. reverse reduction gear box No 10874, supplied by Messrs Modern Wheel Drive Ltd and intended for installation with this engine, was not run with the engine on power trials at Stamford on 17/10/51.

The amount of Entry Fee ... £ :  
2/3 Special ... £ 13 : 6 : 8 When applied for 23 Nov 1951  
Donkey Boiler Fee... £ : When received 19  
Travelling Expenses (if any) £ 3 : - : -

Committee's Minute

Assigned

See F.E. mchys rpt.

JUN 20 1952

Engineer Surveyor to Lloyd's Register of Ship



© 2020

Lloyd's Register Foundation