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# REPORT ON OIL ENGINE MACHINERY.

No. 123940

Received at London Office 4 FEB 1952



of writing Report 4/21 1952 When handed in at Local Office 4/21 1952 Port of London

Survey held at Stamford Lines Date, First Survey 16. 11. 51 Last Survey 11. 1. 1952

Book. Number of Visits 2

Single on the Twin Triple Quadruple Screw vessel MS "KINGFISHER C" Tons Gross            Net           

at Wierenhoe By whom built Jas. W. Cooke & Co Ltd Yard No. 1048 When built           

nes made at Stamford By whom made Messrs. Blackstone & Co Ltd Engine No. 49119 When made 1952

ey Boilers made at            By whom made            Boiler No.            When made           

Horse Power 135 Owners Jas W Cooke & Co Ltd Port belonging to Hull

Power as per Rule 27 Is Refrigerating Machinery fitted for cargo purposes            Is Electric Light fitted           

for which vessel is intended           

ENGINES, &c. —Type of Engines 4 SCSA (EYMER3) 2 or 4 stroke cycle 4 Single or double acting Single

num pressure in cylinders 720 lbs Diameter of cylinders 8 3/4" Length of stroke 11 1/2" No. of cylinders 3 No. of cranks 3

Indicated Pressure 96 lbs Ahead Firing Order in Cylinders 1. 2. 3 Span of bearings, adjacent to the crank, measured inner edge to inner edge 10 1/4" Is there a bearing between each crank Yes Revolutions per minute 600

heel dia. 4 3/2" x 10" Weight 2780 lbs Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>) 828 000 Means of ignition Compression Kind of fuel used Gas oil

Solid forged dia. of journals as per Rule As approved Crank pin dia. 6 1/2" Crank webs Mid. length breadth 7 3/4" Thickness parallel to axis           

Semi built dia. of journals as fitted 6 3/4" Crank webs Mid. length thickness 2 27/32" shrunk Thickness around eye-hole           

All built dia. of journals as fitted            Crank webs Mid. length thickness            Thickness around eye-hole           

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

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

ze Liners, thickness in way of bushes as per Rule            as fitted            Thickness between bushes as per Rule            as fitted            Is the after end of the liner made watertight in the           

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

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-soluble in oil            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 stern tube shaft            If so, state type            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

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

od of reversing SLM 10884 Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of stopping            Thickness of cylinder liners 19/32 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled            If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned into the engine           

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

Pumps worked from 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            If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements           

st Pumps, No. and size            Power Driven Lubricating Oil Pumps, including spare pump, No. and size            Scavange 810 P.P.H. Pressure 1160 P.P.H.

wo independent means arranged for circulating water through the Oil Cooler            Suctions, connected to both main bilge pumps and auxiliary pumps, No. and size:—In machinery spaces            In pump room           

lds, &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 suction 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           

ll Sea Connections fitted direct on the skin of the Ship            Are they fitted with valves or cocks            Are they fixed conveniently 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           

hey 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           

pipes pass through the bunkers            How are they protected           

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

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

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           

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

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

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

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

provision is made for first charging the air receivers           

nging Air Pumps, No.            diameter            stroke            driven by           

liary Engines crank shafts, diameter as per Rule            as fitted            No.            Position           

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

JM  
21/3/52  
except  
TVB



C 10888 }  
C 11489 }  
C 11571 }

AIR RECEIVERS:—Have they been made under survey... *Jes.* State No. of report or certificate...  
Is each receiver, which can be isolated, fitted with a safety valve as per Rule... *Jes.*  
Can the internal surfaces of the receivers be examined and cleaned... *Jes.* Is a drain fitted at the lowest part of each receiver... *Jes.*  
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 *1'-6"* thickness *7/16*  
Seamless, welded or riveted longitudinal joint... Material *M.S.* Range of tensile strength *24/28* Working pressure...  
by Rules... Actual...  
by Rules... Actual... *39.5*

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... Receivers... Separate fuel tanks...  
Donkey boilers... General pumping arrangements... Pumping arrangements in machinery space...  
Oil fuel burning arrangements...  
Have Torsional Vibration characteristics been approved... *Jes. Engine only.* Date of approval *7. 8. 47.*

SPARE GEAR.  
Has the spare gear required by the Rules been supplied... *Jes.*  
State the principal additional spare gear supplied...  
*Please see attached lists*

The foregoing is a correct description,  
*A. Manges for* BLACKSTONE & CO. LTD. Manufacturer.

Dates of Survey while building  
During progress of work in shops - - *1951 Nov. 6 1952 Jan. 11*  
During erection on board vessel - - -  
Total No. of visits *2 (2 shops)*  
Dates of examination of principal parts—Cylinders *16. 11. 57.* Covers *16. 11. 57.* Pistons *16. 11. 57.* Rods...  
Connecting rods *16. 11. 57.*  
Crank shaft *16. 11. 57.* 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 *7324 GA.* 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 *A 18276. H.T. 600 lbs.* *A. 18381. W.P. 395 lbs.* *A. 18390. J.P.T. 22.9.50*

Welded receivers, state Makers' Name... *Messrs. Abbott & Co. (Leamington) 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... *Jes.* If so, state name of vessel *Londan Rpt 123547.*

General Remarks (State quality of workmanship, opinions as to class, &c. *This engine has been built under survey on plans approved by the Society & in accordance with the requirements of the Rules. Steel used in its manufacture has been made at works approved by the Committee and under the supervision of their surveyors. The workmanship is good & the engine is in my opinion eligible for the notation A.M.C. when satisfactorily installed in vessel intended & torsional vibration characteristics of the completed installation have been approved*

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

The amount of Entry Fee... £ *235.3 12 6/8*  
Special ... £ : :  
Donkey Boiler Fee... £ : :  
Travelling Expenses (if any) £ *3 - -*  
When applied for... *4/2/52*  
When received... 19...  
FRI. 1 AUG 1952

*a. c. Widgulf*  
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute...  
Assigned... *See J. E. Rpt.*

