

YACHT.

REPORT ON OIL ENGINE MACHINERY.

16995
No. 13447

Rpt. 4b

Received at London Office

19 FEB 1929

Date of writing Report 18.2.1929 When handed in at Local Office 18.2.1929 Port of Southampton
Date, First Survey 17.8.28 Last Survey 18.2.1929 Number of Visits 22

No. in Survey held at Reg. Book. on the Single Twin Triple Screw vessels
"CRUSADER" (Yacht)
Gross 879.87 Tons
Net 367.68
Built at Southampton By whom built Campbell & McHolmes & Co Yard No. 261 When built 1919
Engines made at Wm. Denny & Co By whom made Sulzer Bros. Engine No. 6007 When made 1928
Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
Brake Horse Power 1560 (2 engs) Owners A. Kingley Macomber Port belonging to New London, Conn.
m. Horse Power as per Rule 467 (2 engs) Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Type of Engines

Sulzer Diesel

2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders No. of cylinders Diameter of cylinders No. of cranks Length of stroke
Is there a bearing between each crank
No. of bearings See also Wm. Denny & Co Report No 91
Revolutions per minute Flywheel dia. Weight Means of ignition Kind of fuel used
Crank pin dia. Crank Webs Mid. length breadth Thickness parallel to axis
Thrust Shaft, diameter at collars as per Rule as fitted
Intermediate Shafts, diameter as per Rule 183 7/8"
Screw Shaft, diameter as per Rule 7.88" Is the shaft fitted with a continuous liner yes
as fitted 8.25"
Thrust Shaft, diameter at collars as per Rule 38"
as fitted 15"
Is the after end of the liner made watertight in the
peller boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner
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
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 no Length of Bearing in Stern Bush next to and supporting propeller 2'-8 3/4"
Propeller, dia. 8'-3" Pitch 11'-3" No. of blades 4 Material Brass whether Moveable no Total Developed Surface 22 (44) sq. feet
Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication

Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with
non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Exhaust pump
Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Bilge Pumps fitted to 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 1 SA 100 x 200 mm Bilge pump at 27 ft/hr S.W. pump at 14 Tons/hr
How driven Main engine (each) Electric motor Electric motor
Ballast Pumps, No. and size Hand pumps at 2 1/2" 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 Engine and Boiler Room 2 2 1/2"
Holds, &c. 1 2 2" in each compartment

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 2 3"
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Space

from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes
Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform yes Are the Overboard Discharges above or below the deep water line Above

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate ✓

What pipes pass through the bunkers ✓ How are they protected ✓

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

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

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 yes Is the Shaft Tunnel watertight no Is it fitted with a watertight door yes worked from upper platform

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

Main Air Compressors, No. 1 No. of stages 2 Diameters 37 1/2 cu ft/min Stroke 19" Driven by Electric motor

Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 19" Stroke 8 cu ft/min Driven by 40 HP Petter Engine

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 19" Stroke 8 cu ft/min Driven by 40 HP Petter Engine

Scavenging Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule as fitted See Manchester Certificates attached

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

What means are provided for cleaning their inner surfaces

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

High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

Material See Wm. Denny & Co Report No 91 Range of tensile strength Working pressure by Rules

Starting Air Receivers, No. Total cubic capacity Internal diameter thickness

Material See Wm. Denny & Co Report No 91 Range of tensile strength Working pressure by Rules

See Manchester Certificates

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W306-0048

IS A DONKEY BOILER FITTED?
HYDRAULIC TESTS:—

THDAY

no

Domestic Boilers only

If so, is a report now forwarded?

✓

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS					
" " COVERS					
" " JACKETS					
" " PISTON WATER PASSAGES					
MAIN COMPRESSORS—1st STAGE					
" 2nd "					
" 3rd "					
AIR RECEIVERS—STARTING					
" INJECTION					
AIR PIPES					
FUEL PIPES					
FUEL PUMPS					
SILENCER					
" WATER JACKET					
SEPARATE FUEL TANKS					

PLANS. Are approved plans forwarded herewith for Shifting (If not, state date of approval) Receivers Separate Tanks
Donkey Boilers General Pumping Arrangements Oil Fuel Burning Arrangements

SPARE GEAR

See list attached to hinterthine Report no 91.

PER PRO
CAMPER & NICHOLSONS Ltd,

F. M. Hale
18th Feb 29.
MANAGER

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops -
During erection on board vessel -
Total No. of visits

Dates of Examination of principal parts—Cylinders Covers Pistons Rods Connecting rods
Crank shaft 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
Crank shaft, Material Identification Mark Flywheel shaft, Material Identification Mark
Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks
Tube shaft, Material Identification Mark Tube & 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

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

The machinery of this vessel has been efficiently installed on board in accordance with Rule requirements & the approved plans, tried under working conditions and found satisfactory, and is in my opinion eligible for the notation + LMC. 2.29.

The amount of Entry Fee
Special
Donkey Boiler Fee
Travelling Expenses (if any)

Committee's Minute

Assigned
Oil engine C.L.

McCimlan
Engineer Surveyor to Lloyd's Register of Shipping.

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