

REPORT ON MACHINERY.

No. 8302.

Received at London Office

WED. 4 MAY. 1921

When handed in at Local Office May 3 1921 Port of DUNDEE Date, First Survey 7 Oct. 1920. Last Survey 27 April 1921.

held at Dundee. Built at Lumbarton By whom built A. McMillan & Son Ltd. Tons Gross Net When built 1902

By whom made Cooper & Greig Ltd. when made By whom made when made

Power Owners Port belonging to Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Description of Engines Twin screw, triple expansion No. of Cylinders 6 No. of Cranks 6 Length of Stroke 30 Revs. per minute Dia. of Screw shaft as per rule 9.06 as fitted 9.8 Material of screw shaft Steel.

fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight boss Yes If the liner is in more than one length are the joints burned If the liner does not fit tightly at the part

ings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two is the shaft lapped or protected between the liners To be finished at Rotterdam Length of stern bush 3'-5"

as per rule 8.06 Dia. of Crank shaft journals as per rule 8.46 as fitted 8.5 Dia. of Crank pin 8.5 Size of Crank webs 16x5.5 Dia. of thrust shaft under as fitted 8.5

Dia. of screw 9'-6" Pitch of Screw 11'-6" No. of Blades 4 State whether moveable No Total surface 36.8 sq. ft. Diameter of ditto 2 3/4" Stroke 15" Can one be overhauled while the other is at work

Diameter of ditto 2 3/4" Stroke 15" Can one be overhauled while the other is at work Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In Holds, &c. Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size

sion pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

s with the sea direct on the skin of the ship Are they Valves or Cocks Are the Discharge Pipes above or below the deep water line

ciently high on the ship's side to be seen without lifting the stokehold plates Are the Blow Off Cocks fitted with a spigot and brass covering plate

with a Discharge Valve always accessible on the plating of the vessel How are they protected carried through the bunkers

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

ction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

ift Tunnel watertight Is it fitted with a watertight door worked from

C.—(Letter for record) Manufacturers of Steel Surface of Boilers 5 1/2 Is Forced Draft fitted Yes No. and Description of Boilers

ure 180 Lb. Tested by hydraulic pressure to Date of test No. of Certificate No. and Description of Safety Valves to

be worked separately Area of fire grate in each boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates Range of tensile strength

Are the shell plates welded or flanged Description of riveting: cir. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

ing ring No. and Description of Furnaces in each boiler Material Outside diameter Thickness of plates crown Description of longitudinal joint

part bottom Thickness of plates bottom Description of longitudinal joint No. of strengthening rings

of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom Working pressure by rules

ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules End plates in steam space:

Area at smallest part Area supported by each stay Working pressure by rules Material of stays Thickness Pitch of stays How are stays secured

st part Area supported by each stay Working pressure by rules Material of Front plates at bottom Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

der at centre Length as per rule Distance apart Number and pitch of stays in each % of strength of joint

re by rules Steam dome: description of joint to shell Diam. of rivet holes Thickness of shell plates Material Description of longitudinal joint How stayed

Working pressure of shell by rules Crown plates Thickness How stayed

ITER. Type Date of Approval of Plan Tested by Hydraulic Pressure to Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

fety Valve Pressure to which each is adjusted Is Easing Gear fitted

W601-0289



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:—Two top end bolts. Two bottom end main bearing bolts. Set of coupling bolts. 6 Cylinder covers. 6 pump ring bolts. Spare valves for air, feed & bilge. Assorted bolts & nuts, & iron of various sizes

The foregoing is a correct description,

*John B. Cooper*  
FOR COOPER & BROS. LIMITED.

Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 1920 OCT. 4. 18. 19. Nov. 1. 15. 29. DEC. 9. 16. 30. 1921 JAN. 11. 20. FEB. 2. 10. 21. 24. MAR. 8. 21. 24.  
{ During erection on board vessel -- }  
Total No. of visits

Is the approved plan of main boiler forwarded by

Dates of Examination of principal parts—Cylinders 9.3.21 Port. 8.4.21 Star Slides 17.3.21 Covers 9.3.21 Port. 8.4.21 Star Pistons 17.3.21  
Connecting rods 1.3.21 Crank shaft 29.11.20 Thrust shaft 30.12.20 Tunnel shafts ✓ Screw shaft 20.1.21, rough turned only  
Stern tube 30.1.21 Steam pipes tested Rotterdam Engine and boiler seatings Rotterdam Engines holding down ✓  
Completion of pumping arrangements Rotterdam Boilers fixed Rotterdam Engines tried under steam ✓  
Completion of fitting sea connections do Stern tube do Screw shaft and propeller  
Main boiler safety valves adjusted do Thickness of adjusting washers  
Material of Crank shaft Steel Identification Mark on Do. 901 J.H.M. Material of Thrust shaft Steel Identification Mark  
Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Steel. Identification Mark  
Material of Steam Pipes Rotterdam Test pressure  
Is an installation fitted for burning oil fuel ✓ Is the flash point of the oil to be used over 150° F. ✓  
Have the requirements of Section 49 of the Rules 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.)

These engines have been built under special survey, and materials & workmanship have been found sound and the engines have been dispatched to Rotterdam, where they fitted on board the barge "Spudonia".  
The propeller shafts were examined when rough turned & completed at Rotterdam.  
The spare part will be completed at Rotterdam, & checked at that port.

The amount of Entry Fee ... £ 5 : 0 :  
75 Special ... £ 29 : 6 : 5  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : :  
When applied for, 1921  
When received, 1.7 June 1921  
H 1-6-21

Committee's Minute

Assigned

*John Mackinlay*  
Engineer Surveyor to Lloyd's Register



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