

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 5. 14 JAN 1954

THURSDAY

Received at London Office

Date of writing Report		28 th Oct.	20	When handed in at Local Office	28 th Oct.	1920	Port of	
No. in Survey book	Ref. Book							
Simple								
on the Twin	Screw vessel							
Quadruple	Triple							
Master.	Built at	Glasgow						
Engines made at	Exinterthue							
Donkey Boilers made at								
Brake Horse Power	420							
Nom. Horse Power as per Rule	82.							
Is Refrigerating Machinery fitted for cargo purposes								
Is Electric Light fitted								

OIL ENGINES, &c.—Type of Engines Bulwer Marine Diesel Engine 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 35 ATs. No. of cylinders 4 No. of cranks 4 Diameter of cylinders 340 mm

Length of stroke 540 mm Revolutions per minute 200 Means of ignition Temperature due to compression Kind of fuel used Heavy fuel oil

Is there a bearing between each crank Yes Span of bearings (Page 92, Section 2, par. 7 of Rules) 430 mm

Distance between centres of main bearings 650 mm Is a flywheel fitted Yes to Crank Shaft Diameter of crank shaft journals as per Rule 207 mm as fitted 215 mm

Diameter of crank pins 215 mm Breadth of crank webs as per Rule 275 mm Thickness of webs as per Rule 116 mm as fitted 280 mm Thickness of webs as per Rule 115 mm as fitted

Diameter of flywheel shaft as per Rule 116 mm Diameter of tunnel shaft as per Rule 275 mm Diameter of thrust shaft as per Rule 116 mm as fitted

Diameter of screw shaft as per Rule 116 mm Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Is the after end of the liner made watertight in the propeller boss If the liner is in more than one length are the joints burned

If 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

If two liners are fitted, is the shaft lapped or protected between the liners If without liners, is the shaft arranged to run in oil

Type of outer gland fitted to stern tube Length of stern bush Diameter of propeller

Pitch of propeller No. of blades state whether moveable Total surface square feet

Method of reversing Direct Is a governor or other arrangement fitted to prevent racing of the engine when reversing Yes Thickness of cylinder liners 27/2 mm

Are the cylinders fitted with safety valves Yes Means of duplication Forced Are the exhaust pipes and silencers water cooled or lagged with non-conducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

within the vessel No. of bilge pumps fitted to the main engines 1 Double acting Diameter of ditto 115 mm Stroke 110 mm

Can one be overhauled while the other is at work No. of auxiliary pumps connected to the main bilge lines Hose driven

Sizes of pumps No. and sizes of suction connected to both main bilge pumps and auxiliary bilge pumps:—In engine room

and in holds, etc. No. of ballast pumps Hose driven Sizes of pumps

Is the ballast pump fitted with a direct suction from the engine room bilges State size Is a separate auxiliary pump suction fitted in

Engine Room and size Are all the bilge suction pipes fitted with roses Are the roses in Engine Room always accessible

Are the sluices on Engine Room bulkheads always accessible Are all connections with the sea direct on the skin of the ship

Are they valves or cocks Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates

Are the discharge pipes above or below the deep water line Are they each fitted with a discharge valve always accessible on the plating of the vessel

Are all pipes, cocks, valves and pumps in connection with the machinery accessible at all times Are the bilge suction pipes, cocks and valves arranged so as to prevent any

communication between the sea and the bilges Is the screw shaft tunnel watertight Is it fitted with a watertight door

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

No. of main air compressors 1 No. of stages 3 Diameters 390/350/75 mm Stroke 280 mm Driven by Crank Shaft

No. of auxiliary air compressors No. of stages Diameters Stroke Driven by

No. of small auxiliary air compressors No. of stages Diameters Stroke Driven by

No. of scavenging air pumps 1. double acting Diameter 700 mm Stroke 450 mm Driven by Crank Shaft

Diameter of auxiliary Diesel Engine crank shafts as per Rule as fitted Are the air compressors and their coolers made so as to be easy of access Yes

AIR RECEIVERS:—No. of high pressure air receivers 1 Internal diameter 250 mm Cubic capacity of each 100 Litres

material S.M. Steel Seamless, lap welded or riveted longitudinal joint

thickness 10 mm working pressure by Rules 15 ATs. No. of starting air receivers Internal diameter

Total cubic capacity Material Seamless, lap welded or riveted longitudinal joint

Range of tensile strength thickness Working pressure by rules 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 Yes What means are provided for cleaning their

inner surfaces Is there a drain arrangement fitted at the lowest part of each receiver Yes



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IS A DONKEY BOILER FITTED?

HYDRAULIC TESTS:-

If so, is a report note forwarded?

lpt. 4

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	4-8-20 5-8-20 -do-	35 ATG. -do-	75 ATG. -do-	R	Test Satisfactory.
COVERS	-do-	1 ATG.	3 ATG.	"	-do-
JACKETS	-do-	5.	3 ..	"	-do-
PISTON WATER PASSAGES	26-7-20	5.	3 ..	"	-do-
MAIN COMPRESSORS—1ST STAGE	22-7-20	3.	35.	"	-do-
2nd	-do-	17.5.	35.	"	-do-
3rd	-do-	70..	140.	"	-do-
AIR RECEIVERS-STARTING					
INJECTION	5-8-20	70..	140.	R	-do-
AIR PIPES	27-7-20	70..	140.	"	-do-
FUEL PIPES	-do-	70..	140.	"	-do-
FUEL PUMPS & VALVES	28-7-20	70..	140.	"	-do-
SILENCER	22-7-20	1 ..	3 ..	"	-do-
WATER JACKET					
SEPARATE FUEL TANKS					

SENT TO LONDON

21-7-20

Receivers IN LONDON OFFICE APPROVED 7/8/20 Separate Tanks

PLANS. Are approved plans forwarded herewith for shafting
(If not, date date of approval)

SPARE GEAR

The foregoing is a correct description.

Sulzer Freres

Societe Anonyme

Coul - M. V. Hobley

Dates of Survey while building
 Dates of work in shop - During progress of work in shop - 22-7-20, 26-7-20, 27-7-20, 28-7-20, 4-8-20, 5-8-20, 14-10-20, 18-10-20, 22-10-20, 28-10-20
 During erection on board vessel -

Total No. of visits - 24

Dates of Examination of principal parts—Cylinders 4-8-20 Covers 4-8-20 Pistons 26-7-20 Rods 22-10-20 Connecting rods 22-10-20

Crank shaft 28-10-20 Thrust shaft Tunnel shafts Screw shaft Propeller Stern tube Engine settings

Engines holding down bolts Completion of pumping arrangements Engines tried under working conditions

Completion of fitting sea connections Stern tube Screw shaft and propeller

Material of crank shaft SMITHOT STEEL Identification Mark on Do. R 28-10-20 Material of thrust shaft Identification Mark on Do.

Material of tunnel shafts Identification Marks on Do. Material of screw shafts Identification Marks on Do.

Is the flash point of the oil to be used over 150° F. Yes

Are

Is this machinery duplicate of a previous case Yes Enter If so, state name of vessel

Are

General Remarks (State quality of workmanship, opinions as to class, etc.) Stock Engine Constructed under

Ordinary Survey. Materials and workmanship good. Full power trial in shops satisfactory.

This machinery has been satisfactorily fitted on board the ship Vessel

No record

No record