

REPORT ON OIL ENGINE MACHINERY.

No. 1961.
WED. AUG. 25 1920

Received at London Office

Date of writing Report 19 Aug. 1920. When handed in at Local Office 19 Port of Stockholm

No. in Survey held at Stockholm Date, First Survey 31. 8. 1917 Last Survey 5. 8. 1920
Reg. Book. Number of Visits 12

on the Single } Screw vessels
Twin }
Triple }

Master Built at Stockholm By whom built J. G. Polmiers & Co Ltd Yard No. 14248 When built
Engines made at Stockholm By whom made J. G. Polmiers & Co Ltd Engine No. 14250 When made 1920

Boilers made at By whom made Boiler No. When made

Horse Power 500 Owners N. V. Soerabaysche Maschinenhandel Port belonging to Haag
Horse Power as per Rule 143 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

ENGINES, &c.—Type of Engines Cylinder Oil Engine ~~2 or 4~~ stroke cycle 2 Single or double acting reversible

pressure in cylinders 264.5 lbs No. of cylinders 4 No. of cranks 4 Diameter of cylinders 520 mm
stroke 750 mm Revolutions per minute 160 Means of ignition Hot bulb Kind of fuel used Crude Oil

bearing between each crank Yes Span of bearings (Page 92, Section 2, par. 7 of Rules) 679 mm
between centres of main bearings 1050 mm Is a flywheel fitted Yes Diameter of crank shaft journals as per Rule 235 mm
as fitted 240 mm

Diameter of crank pins 240 mm Breadth of crank webs as per Rule 313 mm Thickness of ditto as per Rule 132 mm
as fitted the wheel is fitted at end of crankshaft as fitted 350 as fitted 134 mm

Diameter of flywheel shaft as per Rule 227 mm Diameter of tunnel shaft as per Rule 230 mm
as fitted Is the screw shaft fitted with a continuous liner the whole length of the stern tube
as fitted

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

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

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

ster gland fitted to stern tube Length of stern bush Diameter of propeller
propeller No. of blades state whether moveable Total surface square feet

reversing Timing Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Thickness of cylinder liners none fitted

liners fitted with safety valves no Means of lubrication pumps Are the exhaust pipes and silencers water cooled or lagged with
insulating material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

No. of cooling water pumps 2 Is the sea suction provided with an efficient strainer which can be cleared

vessel No. of bilge pumps fitted to the main engines 2 Diameter of ditto 160 mm Stroke 66 mm

overhauled while the other is at work No. of auxiliary pumps connected to the main bilge lines How driven

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

boards, etc. No. of ballast pumps How driven Sizes of pumps

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

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

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

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

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

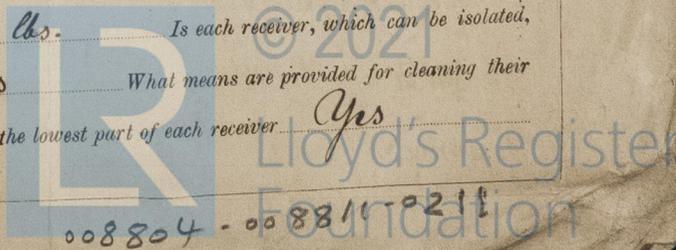
communication between the sea and the bilges Is the screw shaft tunnel watertight Is it fitted with a watertight door

room If 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 One No. of stages Two Diameters 390/155 mm Stroke 300 mm Driven by Main engine

auxiliary air compressors No. of stages Diameters Stroke Driven by
all auxiliary air compressors No. of stages Diameters Stroke Driven by
sucking air pumps none fitted Diameter Stroke Driven by
of auxiliary Diesel Engine crank shafts as per Rule Are the air compressors and their coolers made so as to be easy of access Yes
as fitted

RECEIVERS:—No. of high pressure air receivers 1 Internal diameter 216 mm Cubic capacity of each 50 litres
S. M. Steel Seamless, lap welded or riveted longitudinal joint Seamless Range of tensile strength min. 23 tons/sq inch
7 mm working pressure by Rules 634 lbs. No. of starting air receivers 1 Internal diameter 582 mm
Total cubic capacity 650 litres Material S. M. Steel Seamless, lap welded or riveted longitudinal joint lap welded
Range of tensile strength min. 23 tons/sq inch thickness 9 mm Working pressure by rules 225 lbs. 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 manhole Is there a drain arrangement fitted at the lowest part of each receiver Yes



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

HYDRAULIC TESTS:--

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	1.2.6.1920	264.5 lbs	529 lbs/sq inch	LLOYDS TEST 599 LBS SKM 2.6.20 A	
" " COVERS	1.2.6.1920	ditto	ditto		
" " JACKETS.....	1.2.6.1920		50 lbs/sq inch		
" PISTON WATER PASSAGES.....	(open pistons)				
MAIN COMPRESSORS—1st STAGE.....	1.6.1920	117.5 lbs/sq inch	235 lbs/sq inch	A	
" 2nd "	1.6.1920	441 --	882 --		
" 3rd "					
AIR RECEIVERS—STARTING	2.6.1920	15 Atm	30 Atm	Lloyds Test 30 ATM WORKING PR 15 ATM No 2184 SKM 2.6.1920 A	
" INJECTION	1.6.1920	30 Atm	60 Atm	LLOYDS TEST 60 ATM WORKING PR 30 ATM No 2183 SKM 1.6.20A	
AIR PIPES					
FUEL PIPES					
FUEL PUMPS					
2 SILENCERS.....	26/5 + 28/7 1920		50 lbs/sq inch	HYDR. TEST 50 LBS SKM 26/5 + 28/7 20A	
" WATER JACKET	-- -- --		50 lbs/sq inch		
SEPARATE FUEL TANKS					

PLANS. Are approved plans forwarded herewith for shafting E 179/5; 210-15; 10-2-16; 125-16. Receivers E 16 12-15; Injection, Starting 8-3-16 Separate Tanks —
(If not, state date of approval)

SPARE GEAR to be supplied and inspected when being fitted on board

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
 During progress of work in shops -- 31.8.1917; 5.28.1918; 8.1919; 12.26.24.26 1.2.28 8/1920
 During erection on board vessel --
 Total No. of visits 12

Dates of Examination of principal parts—Cylinders 2 1/4 : 2 1/2 20 Covers 2 1/4 : 2 1/2 20 Pistons 2 1/4 : 2 1/2 20 Rods 15.11.18
 Connecting rods 26.3.20
 Crank shaft 31.8.17 Thrust shaft 28.11.18 Compa. cranks 8.12.17 Screw shaft 8.1.19 Propeller Stern tube Engine seatings
 Engines holding down bolts Completion of pumping arrangements Engines tried under working conditions in ship 24.4.20

Completion of fitting sea connections Stern tube Screw shaft and propeller
 Material of crank shaft S.M. Steel Identification Mark on Do LLOYDS No 1397 SKM 31.8.17A Material of thrust shaft S.M. Steel Identification Mark on Do LLOYDS No 3073 SKM 1.6.20 A
 Material of ~~crank~~ ^{compa. cranks} shafts S.M. Steel Identification Marks on Do LLOYDS No 1549 SKM 8.12.17A Material of screw shafts Identification Marks on Do.

Is the flash point of the oil to be used over 150° F. Yes
 Is this machinery duplicate of a previous case Yes If so, state name of vessel see Mem. reports no 1799-1800

General Remarks (State quality of workmanship, opinions as to class, &c.)
 I am of opinion that this engine is of superior material and workmanship, and as it has been designed and constructed under special survey, it is respectfully submitted that it be classed **LMC**, as soon as it has been fitted on board to the satisfaction of the Society's local Surveyors

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

The amount of Entry Fee ... £ : : When applied for,
 Special survey in shop ... £ 35 : 6:8 : 19 Aug. 1920
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) £ : : Sept 2. 1920

Committee's Minute TUE. 17 OCT. 1922
 Assigned Not for classing Committee

A. Hakson
 Engineer Surveyor to Lloyd's Register of Shipping.
 assisted by Mr. K. J. Andersson

TUE. 17 OCT. 1922 © 2021
 See Ref. R 12 555
 Lloyd's Register Foundation