

Rpt. 4b

REPORT ON OIL ENGINE MACHINERY.

No. 7752.

Received at London Office

9 JUL 1928

Date of writing Report 28/6 1928. When handed in at Local Office 28 Port of Copenhagen
 No. in Survey held at Copenhagen & Nakskov Date, First Survey 14/9 1927 Last Survey 26/6 1928
 Reg. Book. 43289 on the Single Motor "VICTORIA" Screw vessel Nakskov Tons Gross 4499.93
Triple Quadruple Net 2746.83

Built at Nakskov By whom built Nakskov Skibsværft Yard No. 34 When built 1928
 Engines made at Copenhagen By whom made Bürmeister & Wain Engine No. 142 When made 1927-8
 Boilers made at Nakskov By whom made Nakskov Skibsværft Boiler No. 8 When made 1928
 Horse Power 2100 Owners 9/5 Orient Port belonging to Copenhagen
 Horse Power as per Rule 2435.4 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes
 for which vessel is intended Ocean Trade General Cargo

ENGINES, &c.—Type of Engines Vertical Diesel, trunk type 2 or 4 stroke cycle 4 Single or double acting single
 pressure in cylinders 35 kg/cm² Diameter of cylinders 550 mm Length of stroke 1000 mm No. of cylinders 2 x 6 No. of cranks 2 x 6
 bearings, adjacent to the Crank, measured from inner edge to inner edge 710 mm Is there a bearing between each crank yes
 as per minute 135 TURNING flywheel dia. 1362 mm Weight 850 kg Means of ignition compression Kind of fuel used Diesel oil at 50°C
 shaft, dia. of journals as per Rule 340 mm Crank pin dia. 340 mm Crank Webs as per Rule 9 1/4" Mid. length breadth 670 mm Thickness parallel to axis 213 mm
 as fitted 340 mm as fitted 9 1/4" as fitted 193 mm as fitted 159 mm Thickness around eyehole as per Rule 340 mm
 I Shaft, diameter as per Rule 10.18" Intermediate Shafts, diameter as per Rule 10 3/16" Thrust Shaft, diameter at collars as fitted 340 mm
 as fitted 10.18" as fitted 10 3/16" Is the tube screw shaft fitted with a continuous liner yes
 as fitted 10.18" as fitted 10 3/16" as fitted 10 3/16" as fitted 10 3/16"
 Liners, thickness in way of bushes as per Rule 0.607" Thickness between bushes as per rule 0.46" Is the after end of the liner made watertight in the
yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner in one length
 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 yes
 are fitted, is the shaft lapped or protected between the liners yes Is an approved Oil Gland or other appliance fitted at the after
 tube shaft yes Length of Bearing in Stern Bush next to and supporting propeller 1300 mm
 dia. 11'-2" Pitch 9'-6" No. of blades 3 Material Brass whether Moveable No Total Developed Surface 33.5 sq. feet
 reversing Engines direct reversible Is a governor or other arrangement fitted to prevent racing of the engine when detached yes Means of lubrication
 Thickness of cylinder liners 38 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with
 ing material yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine funnel
 Water Pumps, No. 2 off 120 to each Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
 ps worked from the Main Engines, No. 2 Diameter 150 mm Stroke 170 mm Can one be overhauled while the other is at work yes
 nected to the Main Bilge Line No. and Size 2 off 1 off 150 to 1 off 205
How driven by main engines electrically electrically
 mps, No. and size 1 off 150 to rotary Lubricating Oil Pumps, including Spare Pump, No. and size 2 off 40 to of wheel
 ependent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
 and size:—In Machinery Spaces 4 off 2 1/2"
1st HOLD: 2 off 3" 2nd HOLD: 2 off 3 1/2" 3rd HOLD: 2 off 3" 4th HOLD: 2 off 3" 1st 2 1/2" TUNNEL WELL: 1 off 2 1/2" TOP: 1 off 2 1/2"
 ant Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 off 3 1/2" 1 off 5"
 Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces
 ily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes
 Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks valves up to D.B. blow off cock
 sufficiently high on the ship's side to be seen without lifting the platform plates yes Are the Overboard Discharges above or below the deep water line above
 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 yes
 ass through the bunkers yes How are they protected yes
 ass through the deep tanks yes Have they been tested as per Rule yes
 s, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 cement 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
 to another yes Is the Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from main deck
 vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork yes

Compressors, No. 2 off No. of stages 3 Diameters 600 - 540 - 120" Stroke 320 Driven by the main engines
 Air Compressors, No. 1 " No. of stages 2 Diameters 225 - 68" Stroke 220 Driven by 1st engine
 Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 92 - 28" Stroke 60 Driven by auxiliary engine
 Air Pumps, No. 1 Diameter 10" Stroke 10" Driven by main engine

Engines crank shafts, diameter as per Rule 10.18" as fitted 10 3/16"
 RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes
 nal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces man holes in starting air receivers
 ain arrangement fitted at the lowest part of each receiver yes arrangements made for blowing out injection air receivers

gh Pressure Air Receivers, No. 2 Cubic capacity of each 250 liters Internal diameter 404 mm thickness 23 mm
 unless, lap welded or riveted longitudinal joint lap welded Material S.M. steel Range of tensile strength 370-390 kg/cm² Working pressure by Rules 7.3 kg/cm²
 June 8. 14. 27 unless, lap welded or riveted longitudinal joint lap welded Material S.M. steel Range of tensile strength 370-390 kg/cm² Working pressure by Rules 7.3 kg/cm²
 orting Air Receivers, No. 1 Total cubic capacity 16 m³ Internal diameter 6'-1" 5'-11 1/2" thickness 1 1/2" 15/16" 1 1/4"
 No. of Visits 27 unless, lap welded or riveted longitudinal joint riveted Material S.M. steel Range of tensile strength 370-390 kg/cm² Working pressure by Rules 28.7 kg/cm²

WS56-0307



Lloyds Register
Foundation

IS A DONKEY BOILER FITTED? *yes.*

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

Donkey Boilers

General Pumping Arrangements

If so, is a report now forwarded? *yes.*

Receivers

Separate Tanks

Oil Fuel Burning Arrangements

SPARE GEAR

as per accompanying list.

* The plans are intended to be used for the sister vessel *Yard No. 35*, at present under construction.

The foregoing is a description,

BURMEISTER & WAIN
MASIN OG SKIBSBYGERI

Manufacturer.

H. M. M.

Dates of Survey while building	During progress of work in shops - -	14/9. 16/9. 19/9. 22/9. 26/9. 28/9. 30/9. 12/10. 17/10. 29/10. 2/11. 3/11. 6/11. 12/11. 30/11. 27/12. 16/1. 23/1. 24/1. 28/1. 28.
	During erection on board vessel - -	27/4. 16/5. 22/5. 11/6. 12/6. 18/6. 19/6. 22/6. 26/6. 2.
	Total No. of visits	44

Dates of Examination of principal parts—Cylinders and Covers 30/3. 31/3. 9/2. 28. Pistons 29/10. 12/11. 28. Connecting rods 16/9. Tube shaft 27/4. 28. Crank shafts 22/9. 30/9. 31/1. 18/1. 28. Flywheel shaft Thrust shafts 17/10. 29/10. 13/1. 18/1. 28. Intermediate shafts 27/4. 28. Engines holding down bolts 22/5. Engines tried under working conditions 22/6. Completion of fitting sea connections 27/4. 28. Completion of pumping arrangements 12/6. 28. Engines tried under working conditions 22/6. Crank shafts Material S. M. steel. Identification Mark $\Phi 13-1-28$ $\Phi 18-1-28$ Flywheel shaft, Material LLOYD'S No. 9050 - 9054 Identification Mark 2449. Thrust shafts Material S. M. steel. Identification Mark $\Phi 13-1-28$ $\Phi 18-1-28$ Intermediate shafts, Material S. M. steel. Identification Marks 27-4. Tube shaft, Material Identification Mark Screw shafts Material S. M. steel. Identification Mark J. Q. 30-12.

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 *M/S "ASTORIA" and M/S "TACOMA".*

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

This machinery has been built under Special Survey and in accordance with the Society's Rules, the approved plans and the requirements contained in the Letters E dated 21/7. 18/8. 27/9. 17/10 27.

The material used in the construction has been tested and examined as required by the Rules, either by us or as per certificates produced, and the workmanship is of good description throughout.

After completion the whole of the main and auxiliary machinery was tried full power working conditions and found satisfactory, and on the final trip the manoeuvring of the main engines was tested and found good.

Recommend the vessel's machinery to have notation of **LMC-628**, OIL ENGINES.

The amount of Entry Fee ... £ 109. 20.

Special ... £ 1935. 57.

Donkey Boiler Fee ... £ 50. 0.

Travelling Expenses (if any) ... £ 343. 50.

Committee's Minute

Assigned

When applied for, 7. 7. 19. 28.

When received, 832. 45 - 8/8/28

635. 82 - 17/8/28

17 JUL 1928

CERTIFICATE WRITTEN

© 2021

Lloyd's Register Foundation