

REPORT ON OIL ENGINE MACHINERY.

No. 18247

Received at London Office

Report 18 April 1952 When handed in at Local Office Amsterdam 19 52 Port of Amsterdam
 Survey held at Amsterdam Date, First Survey 24 Jan 1951 Last Survey 18 April 1952
 Number of Visits 15
 Single or double acting Single
 Gross Tons 101 Net Tons 1332
 Yard No. 101 When built 1952
 Engine No. 1332 When made 1951
 Boiler No. When made
 Port belonging to
 Owners
 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

52. Type of Engines T.M.A.S 276 2 or 4 stroke cycle 4 Single or double acting Single
 Pressure in cylinders 50 kg/cm² Diameter of cylinders 270 mm Length of stroke 500 mm No. of cylinders 6 No. of cranks 6
 Mean Pressure 7.5 kg/cm² Ahead Firing Order in Cylinders 1-3-5-6-4-2 Span of bearings, adjacent to the crank, measured
 from inner edge 320 mm Is there a bearing between each crank Yes Revolutions per minute 375
 Weight 1850 kg Moment of inertia of flywheel (lbs. in² or Kg. cm.²) 1570 100 Means of ignition Comp. Kind of fuel used Gas oil
 dia. of journals 110 mm as per Rule Crank pin dia. 200 mm Crank webs Mid. length breadth 340 mm Thickness parallel to axis
 as fitted as fitted as fitted as fitted Mid. length thickness 02 mm Thickness around eye-hole
 Intermediate Shafts, diameter 190 mm Thrust Shaft, diameter at collars 145 mm
 as per Rule as fitted as per Rule as fitted
 Screw Shaft, diameter 177.5 mm Is the tube shaft fitted with a continuous liner Yes
 as per Rule as fitted as per Rule as fitted

Thickness in way of bushes 14 mm Thickness between bushes 11 mm Is the after end of the liner made watertight in the One length
 as per Rule as fitted as per Rule as fitted
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Yes
 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-
 If 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
 connecting rod If so, state type Length of bearing in Stern Bush next to and supporting propeller
 Tube shaft Pitch No. of blades Material whether moveable Total developed surface sq. feet
 Kind of damper, if fitted
 Reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of
 Thickness of cylinder liners 21 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled
 with non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
 Cooling Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel
 worked from the Main Engines, No. 1 Diameter 130 mm Stroke 75 mm Can one be overhauled while the other is at work
 connected to the Main Bilge Line (No. and size How driven
 If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1045 t.p.h.
 independent means arranged for circulating water through the Oil Cooler Suctions, connected to both main bilge pumps and auxiliary
 No. and size:—In machinery spaces In pump room
 Power Pump Direct Suctions to the engine room bilges, No. and size
 bilge suction pipes in holds and tunnel well fitted with strum-boxes Are the bilge suction in the machinery spaces led from easily
 accessible boxes, placed above the level of the working floor, with straight tail pipes to the bilges
 connections fitted direct on the skin of the Ship Are they fitted with valves or cocks Are they fixed
 high on the ship's side to be seen without lifting the platform plates Are the overboard discharges above or below the deep water line
 fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate
 pass through the bunkers How are they protected
 pass through the deep tanks Have they been tested as per Rule

s, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times
 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
 from one compartment to another Is the shaft tunnel watertight Is it fitted with a watertight door worked from
 vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
 Compressors, No. 1 No. of stages 1 diameters 100/120 mm stroke 90 mm driven by In. Engine
 Air Compressors, No. No. of stages diameters stroke driven by
 Auxiliary Air Compressors, No. No. of stages diameters stroke driven by
 arrangement is made for first charging the air receivers
 Air Pumps, No. diameter stroke driven by
 engines crank shafts, diameter as per Rule as fitted Position
 auxiliary engines been constructed under special survey Is a report sent herewith

JM
26/5/52

4^B 18247

AIR-RECEIVERS:—Have they been made under survey *Yes* State No. of report or certificate *C 5995*

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 and cleaned *Yes* Is a drain fitted at the lowest part of each receiver *Yes*

Injection Air Receivers, No. *—* Cubic capacity of each *—* Internal diameter *—* thickness *—*
Seamless, welded or riveted longitudinal joint *—* Material *—* Range of tensile strength *—* Working pressure *—*

Starting Air Receivers, No. *1* Total cubic capacity *1200 liters* Internal diameter *496 mm* thickness *9.5 mm*
Seamless, welded or riveted longitudinal joint *Seamless* Material *1/2" steel* Range of tensile strength *63-65 kg/cm²* Working pressure *—*

IS A DONKEY BOILER FITTED *—* If so, is a report now forwarded *—*

Is the donkey boiler intended to be used for domestic purposes only *—*

PLANS. Are approved plans forwarded herewith for shafting *20-3-52* Receivers *20-3-52* Separate fuel tanks *—*
(If not, state date of approval)

Donkey boilers *—* General pumping arrangements *—* Pumping arrangements in machinery space *—*
Oil fuel burning arrangements *—*

Have Torsional Vibration characteristics been approved *—* Date of approval *25/3/52*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *—*
State the principal additional spare gear supplied *—*

The foregoing is a correct description, *WERKSPOR N.V.* Manufacturer.

Dates of Survey while building: During progress of work in shops *1951 Jan 31, Feb 7-9-19-20-22, March 1, May 22, June 6*

During erection on board vessel *Aug 1-13; 1952 March 7, April 19-25-28*
Total No. of visits *15*

Dates of examination of principal parts—Cylinders *7-9-51* Covers *11-1-52* Pistons *6-4-51* Rods *—* Connecting rods *6-4-51*
Crank shaft *19-1-51* Flywheel shaft *—* Thrust shaft *25-4-52* Intermediate shafts *25-3-52* Tube shaft *—*

Screw shaft *15-3-52* Propeller *—* Stern tube *19-4-52* Engine seatings *—* Engine holding down bolts *—*
Completion of fitting sea connections *—* Completion of pumping arrangements *—* Engines tried under working conditions *—*

Crank shaft, material *1/2" steel* Identification mark *LLOYD'S No 110* Flywheel shaft, material *—* Identification mark *—*
Thrust shaft, material *1/2" steel* Identification mark *H.P.B.M. 12-4* Intermediate shafts, material *1/2" steel* Identification marks *—*

Tube shaft, material *—* Identification mark *—* Screw shaft, material *1/2" steel* Identification mark *LLOYD'S No 110*
Identification marks on air receivers *No 9068063-906870 LLOYD'S TEST 60 kg/cm²*

Welded receivers, state Makers' Name *The Chesterfield Tube Co. LTD.*

Is the flash point of the oil to be used over 150°F *—*
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with *—*

Description of fire extinguishing apparatus fitted *—*
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *—* If so, have the requirements of the Rules been complied with *—*

If the notation for ice strengthening is desired, state whether the requirements in this respect have 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.) *This engine has been built under special survey in accordance with approved plan and Society's Rules. Material tested as required and workmanship found good. The engine has been tested on makers test bench under full load conditions and found in a satisfactory working order. The engine has been shipped to Rotterdam (Rotterdam district) in my opinion the vessel for which this engine is intended will be eligible for the notation of LMC (with date) when the whole machinery has been fitted satisfactory on board and a trial under full working conditions. Copy Certificates of Shafting, Thrust & Fastenings are attached.*

The amount of Entry Fee *13 x 86 x 75,60* £ *7321.00*
Special ... £ ... : When applied for *5 5 19 52*
Donkey Boiler Fee... £ ... : When received *19*
Travelling Expenses (if any) £ *6.00*
TUES. 6 JAN 1953

Assigned *See F.E. mchly, rpt. Rot 35489*

