

REPORT ON OIL ENGINE MACHINERY.

No. 18226

Received at London Office

21 APR 1952

Report 8th April 1951 When handed in at Local Office 19 Port of Amsterdam
 Survey held at Amsterdam Date, First Survey 31 May 1950 Last Survey 5th April 1951
 Number of Visits 14
 Single Screw vessel M.S. "BANGO"
 By whom built "De Hulp"
 By whom made Werkspoor N.V.
 Yard No. 100 When built 1951
 Engine No. 1306 When made 1950
 Boiler No. When made
 Port belonging to
 Owners
 Power 430
 Is Refrigerating Machinery fitted for cargo purposes
 Is Electric Light fitted

VES, &c. —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
 Rated Pressure 7.5 kg/cm² Ahead Firing Order in Cylinders 1-3-5-6-4-2 Span of bearings, adjacent to the crank, measured
 edge to inner edge 310 mm Is there a bearing between each crank Yes Revolutions per minute 375
 Weight 1250 kg Moment of inertia of flywheel (lbs. in² or Kg. cm.²) 2575 Means of ignition Comp. Kind of fuel used Diesel oil
 dia. of journals as per Rule 200 mm Crank pin dia. 100 mm Crank webs Mid. length breadth 340 mm Thickness parallel to axis
 Mid. length thickness 0.1 mm Shrunk Thickness around eyehole
 Intermediate Shafts, diameter 190 mm Thrust Shaft, diameter at collars 145 mm
 Screw Shaft, diameter 177.5 mm Is the tube shaft fitted with a continuous liner Yes
 Thickness in way of bushes as per Rule 14 mm Thickness between bushes as per Rule 11 mm Is the after end of the liner made watertight in the
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner 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-
 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
 If so, state type Length of bearing in Stern Bush next to and supporting propeller
 Pitch No. of blades Material whether moveable Total developed surface sq. feet
 Inertia of propeller (lbs. in² or Kg. cm.²) 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
 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
 water led to the bilges 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 1 245 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
 d-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
 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
 cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times
 Element 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
 in one compartment to another Is the shaft tunnel watertight Is it fitted with a watertight door worked from
 sel, 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 M. Engine
 Air Compressors, No. No. of stages diameters stroke driven by
 Air Compressors, No. No. of stages diameters stroke driven by
 is made for first charging the air receivers
 Air Pumps, No. diameter stroke driven by
 gines crank shafts, diameter as per Rule No. Position
 Auxiliary engines been constructed under special survey Is a report sent herewith

012460-012472-0132

AIR RECEIVERS:—Have they been made under survey *Yes* State No. of report or certificate *C. 9595*

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 *1100 litres* Internal diameter *496 mm* thickness *—*

Seamless, welded or riveted longitudinal joint *Seamless* Material *S.M. Steel* Range of tensile strength *44-64 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 *10-3-52* Receivers *10-3-52* Separate fu

Donkey boilers *—* General pumping arrangements *—* Pumping arrangements in machinery space *—*

Oil fuel burning arrangements *—*

Have Torsional Vibration characteristics been approved *Yes* Date of approval *—*

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 *1950 May 31, June 6-8, 13-14, 19-30, Aug 15 Sept 12-19-1952 March 14, April 2-7*

Dates of examination of principal parts—Cylinders *13-6-50* Covers *24-29/6/50* Pistons *14-6-50* Rods *—* Connecting rods *—*

Crank shaft *13-6-50* Flywheel shaft *—* Thrust shaft *9-2-48* Intermediate shafts *5-4-52* Tube shaft *—*

Screw shaft *4-4-52* Propeller *4-4-52* Stern tube *14-3-52* Engine seatings *—* Engine holding down bolts *—*

Completion of fitting sea connections *—* Completion of pumping arrangements *—* Engines tried under working conditions *—*

Crank shaft, material *S.M. Steel* Identification mark *110XDS N° 10010* Flywheel shaft, material *—* Identification mark *—*

Thrust shaft, material *S.M. Steel* Identification mark *110XDS N° 0393* Intermediate shafts, material *S.M. Steel* Identification mark *—*

Tube shaft, material *—* Identification mark *—* Screw shaft, material *S.M. Steel* Identification mark *—*

Identification marks on air receivers *N° 906070-906073 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*

Survey in accordance with approved plan and Society's rules. Material as required and workmanship found good. The engine has been tested

on test bench under full load condition and found in good work. The engine has been shipped to Middelburg (Rotterdam district).

In my opinion the vessel for which this engine is intended will be eligible for the notation of L.M.C. (with date) when the whole machinery is

fitted satisfactory on board and tried under full working conditions. Copy Certificate of Crankshaft, Thrust and Int. shafts, screwshaft and receivers attached.

13x06x75.60

The amount of Entry Fee ... £ *732,00*

Special ... £ *—* When applied for *16.4.1952*

Donkey Boiler Fee... £ *—* When received *19*

Travelling Expenses (if any) £ *72,00*

Engineer Surveyor to Lloyd's Register

Assigned *Su F.E. Mely, rpt Rot 35488*

TUES. 6 JAN 1953

Lloyd's Register Foundation