

REPORT ON OIL ENGINE MACHINERY.

No. 19405

Received at London Office

12 APR 1954

Date of writing Report 5-4 1954 When handed in at Local Office 19 Port of Amsterdam
 No. in Survey held at Amsterdam Date, First Survey 26/8/53 Last Survey 8/3 1954
 Reg. Book. Number of Visits 8

Single
on the Twin
Triple
Quadruple
Screw vessel "GRAMSBERGEN" Tons Gross Net

Built at Waterhuizen By whom built van Diepen Yard No. 929 When built 1954

Engines made at Amsterdam By whom made Werkspoor N.V. Engine No. 1683 When made 1954

Donkey Boilers made at By whom made Boiler No. When made

Brake Horse Power { Maximum 650 Service 130 Owners Funness Port belonging to

M.N. as per Rule 130 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted Yes

Trade for which vessel is intended Ocean going

OIL ENGINES, &c. — Type of Engines TMA5336 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 330 mm Length of stroke 600 mm No. of cylinders 6 No. of cranks 6

Mean Indicated Pressure 7.29 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in

way of a crank) 394 mm Is there a bearing between each crank Yes Revolutions per minute { Maximum 950 Service 950

Flywheel dia 1400 mm Weight 1145 kg Moment of inertia of flywheel (lbs. in² or Kg. cm²) 5753 Means of ignition Comp Kind of fuel used Diesel

" " " " balance wts. (" " " ")

Crank Shaft, { Solid forged dia. of journals as per Rule 245 mm as fitted 245 mm Crank pin dia. 105 mm Crank webs Mid. length breadth 4.80 mm Thickness parallel to axis shrunk Mid. length thickness 10.2 mm Thickness around eyehole

Flywheel Shaft, diameter as per Rule 230 mm as fitted Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule 230 mm as fitted

Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the { tube screw } shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the

propeller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

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 Is an approved Oil Gland fitted at the after

end of stern tube If so, state type Length of bearing in Stern Bush next to and supporting propeller

Propeller, dia Pitch No. of blades Material whether moveable Total developed surface sq. feet

Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm²) Kind of damper, if fitted

Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine for Means of

lubrication forced Thickness of cylinder liners 25 mm Are the cylinders fitted with safety valves for Are the exhaust pipes and silencers water cooled

or lagged with non-conducting material Rules If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned

back to the engine Cooling Water Pumps, No. and how driven Two h.e. Working F.W. rotary

S.W. Rotary Spare F.W. S.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. and capacity 1 rotating 30 T.H. Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and capacity of each How driven

Is the cooling 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

arrangements Ballast Pumps, No. and capacity Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1 gear driven 7 T.H.

Are two independent means arranged for circulating water through the Oil Cooler Branch Bilge Suctions

No. and size:—In machinery spaces In pump room

In holds, &c.

Direct Bilge Suctions to the engine room bilges, No. and size

Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes Are the bilge suction in the machinery spaces led from easily

accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Are all Sea Connections fitted direct on the skin of the Ship Are they fitted with valves or cocks Are they fixed

sufficiently 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

Are they each 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

What pipes pass through the bunkers How are they protected

What pipes pass through the deep tanks Have they been tested as per Rule

Are all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times

Is the 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

spaces, or from one compartment to another Is the 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

Main Air Compressors, No. One No. of stages Two diameters 180/100 mm stroke 100 mm driven by h.e.

Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

Small Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

What provision is made for first charging the air receivers

Scavenging Air Pumps or Blowers, No. How driven

Auxiliary Engines Have they been made under survey Engine Nos.

Makers name Position of each in engine room

Report No.

50044-00259-0047

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AIR RECEIVERS:—Have they been made under survey Yes State No. of report or certificate 2/2435/3 V
State full details of safety devices Spring loaded safety valves
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. 2 Total cubic capacity 2000 L Internal diameter 600 mm thickness 11 mm
Seamless, welded or riveted longitudinal joint Seamless Material 1/2 in Steel Range of tensile strength 47.4-47.5 kg/cm² Working pressure 30 kg/cm²

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 Appendix 1-1-54 Receivers 2-3-54 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 Yes Date and particulars of approval 2-2-54 for 325 hp

SPARE GEAR.

Has the spare gear required by the Rules been supplied — State if for "short voyages" only —

State the principal additional spare gear supplied —

The foregoing is a correct description,

Werkspoor N.V.

Manufacturer.

Dates of Survey while building 26/4/53 16/11/53 2/2/54 6/2/54 9/2/54 17/2/54 9/3/54

During erection on board vessel —

Total No. of visits 8

Dates of examination of principal parts—Cylinders 26/2/54 Covers 2/2/54 Pistons 17/2/54 Rods — Connecting rods 16/1/53

Crank shaft 26/4/53 9/3/54 Flywheel shaft — Thrust shaft 2/2/54 Intermediate shafts — Tube shaft —

Screw shaft — Propeller — Stern tube — Engine seatings — Engine holding down bolts —

Completion of fitting sea connections — Completion of pumping arrangements — Engines tried under working conditions 17/2

Crank shaft, material 1/2 in Steel Identification mark 38040 17/1 Flywheel shaft, material — Identification mark —

Thrust shaft, material 1/2 in Steel Identification mark 38022 9/1 Intermediate shafts, material — Identification marks —

Tube shaft, material — Identification mark — Screw shaft, material — Identification mark —

Identification marks on air receivers 38040 17/1 38022 9/1

Welded receivers, state Makers' Name Messrs Rheinische Röhrenwerke A.G. Düsseldorf-Rhein

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 —

Full description of fire extinguishing apparatus fitted in machinery spaces —

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 —

What is the special notation desired —

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 Yes If so, state name of vessel Van Diepen Jans N° 928

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

The engine has been built under Special Survey in accordance with the approved plans, Secretarial letters and the Society's Rules. Materials have been tested as required and workmanship found good. The engine has been tried under full working condition and has been tested and found satisfactory and merits in my opinion the approval of the Committee to grant the vessel where the engine is intended for a record + LMC with date when installed and tried on board. The engine has been shipped to Waterhuizen. Copy set of crankshaft, thrustshaft and airreceivers attached.

The amount of Entry Fee £473.-

Special — £ —

Donkey Boiler Fee — £ —

Travelling Expenses (if any) 6.-

When applied for 2-4 1954

When received 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute —

Assigned + LMC 7.54.

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