

REPORT ON OIL ENGINE MACHINERY.

No. 25226

-6 FEB 1937

Received at London Office

Date of writing Report 29-1-1937 When handed in at Local Office 10 Port of Rotterdam

No. in Survey held at Alblasweden Date, First Survey 16-11-36 Last Survey 19-1-1937
Reg. Book. Number of Visits 4

on the Single motor
Twin Screw vessel
Triple
Quadruple "DENBIGH COAST." Tons ^{Gross}
_{Net}

Built at Alblasweden By whom built Waf de Noord Yard No. 562 When built 1936-37

Engines made at Cologne By whom made Humboldt Deutz Engine No. 402062/14 When made 1936

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

Brake Horse Power 400 Owners Coal Lines Ltd. Port belonging to Liverpool

Nom. Horse Power as per Rule 94 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted Yes

Trade for which vessel is intended

IL ENGINES, &c.—Type of Engines See Dusseldorf ref. No. 140. 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks

Mean Indicated Pressure Span of bearings, adjacent to the Crank, measured from inner edge to inner edge Is there a bearing between each crank

Revolutions per minute Flywheel dia. Weight Means of ignition Kind of fuel used

Crank Shaft, dia. of journals as per Rule Crank pin dia. Crank Webs Mid. length breadth Thickness parallel to axis
 as fitted Mid. length thickness shrunk Thickness around eyehole

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

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

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
 as fitted as fitted

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 or other appliance fitted at the after end of the tube
 If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. 1800mm Pitch 1300mm No. of blades 4 Material bronze whether Moveable solid Total Developed Surface 1.317

Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication
 Thickness of cylinder liners Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
 non-conducting material Both 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. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. 1 Diameter 100mm Stroke 85mm Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size 2. centrifugal 2 to 6 tons p.h.
 How driven by belts from aux. engine.

Is the cooling water led to the bilges overboard 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 size 2 2 to 8 p.h. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2. 1 screw pump 1 spare one

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
 pumps, No. and size:—In Machinery Spaces 3 2 64mm. In Pump Room

Holds, &c. 4 2 2 1/2 four plates 1 2 1/2

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 2 76mm.

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces
 from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Valves

Are they fixed 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

Are they each 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

At pipes pass through the bunkers How are they protected

At 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 Yes

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 Yes Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

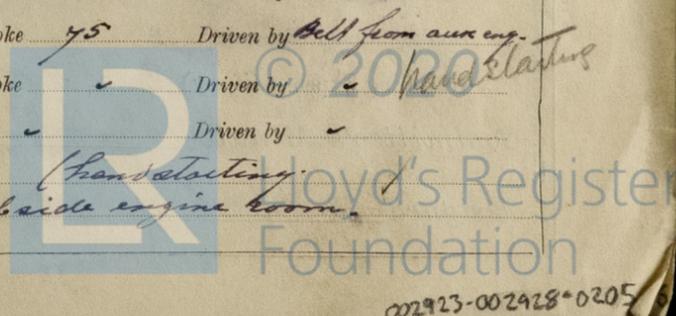
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

Auxiliary Air Compressors, No. one No. of stages 2 Diameters 125-110 Stroke 75 Driven by Belt from aux. eng.

Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

Revolving Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule No. one Position Starboard engine room
 as fitted See Dusseldorf ref. 157.



AIR RECEIVERS:—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*

High Pressure Air Receivers, No. *✓* Cubic capacity of each *✓* Internal diameter *✓* thickness *✓*

Seamless, lap welded or riveted longitudinal joint *✓* Material *✓* Range of tensile strength *✓* Working pressure *by Rules ✓*
Actual ✓

Starting Air Receivers, No. *✓* Total cubic capacity *✓* Internal diameter *✓* thickness *✓*

Seamless, lap welded or riveted longitudinal joint *✓* Material *✓* Range of tensile strength *✓* Working pressure *by Rules ✓*
Actual ✓

IS A DONKEY BOILER FITTED? *no* 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 *see report 9-7-36* Receivers *✓* Separate Fuel Tanks *11-9-36*

Donkey Boilers *✓* General Pumping Arrangements *4-9-36* Pumping Arrangements in Machinery Space *4-9-36*

Oil Fuel Burning Arrangements *4-9-36*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes*

State the principal additional spare gear supplied *See Insulation report.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops--
During erection on board vessel--
Total No. of visits *54*

Dates of Examination of principal parts—Cylinders *✓* Covers *✓* Pistons *✓* Rods *✓* Connecting rods *✓*
Crank shaft *✓* Flywheel shaft *✓* Thrust shaft *✓* Intermediate shafts *✓* Tube shaft *✓*
Screw shaft *16-11-36* Propeller *16-11-36* Stern tube *16-11-36* Engine seatings *16-11-36* Engines holding down bolts *15-1-37*
Completion of fitting sea connections *16-11-36* Completion of pumping arrangements *19-1-37* Engines tried under working conditions *19-1-37*
Crank shaft, Material *✓* Identification Mark *✓* Flywheel shaft, Material *✓* Identification Mark *✓*
Thrust shaft, Material *✓* Identification Mark *✓* Intermediate shafts, Material *✓* Identification Marks *✓*
Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *5 M. steel* Identification Mark *✓*

Is the flash point of the oil to be used over 150° F. *Yes*

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with *Yes*

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 *Yes* If so, state name of vessel *Edenvale de Noord's 559.*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery has been made and fitted in accordance with approved plans, Society's Rules and Secretary's letters. Main-auxiliary engine and centrifugal pumps have been tested under full working condition and found working and manoeuvring satisfactorily and in my opinion eligible for the records of S.L.M.C. 1-37. oil engines. and O.G.*

The amount of Entry Fee .. £ *Original* When applied for, *5. 2. 1937*
Special £ *at Insulation report.*
Donkey Boiler Fee £ : When received, *11.00 2-3 37/3*
Travelling Expenses (if any) £ *11.00 2-3 37/3*

Committee's Minute *FRI 12 FEB 1937*

Assigned + Linc 1.37 fee *OG*

C.H. Bourse
Engineer Surveyor to Lloyd's Register of Shipping.

