

## REPORT ON OIL ENGINE MACHINERY.

No. 95933

Received at London Office

FEB 15 1938

Date of writing Report 14<sup>th</sup> Feb 1938 When handed in at Local Office 14<sup>th</sup> Feb 1938 Port of

NEWCASTLE-ON-TYNE

No. in Survey held at WILLINGTON QUAY.  
Reg. Book.Date, First Survey 30 Sept 1937. Last Survey 3<sup>rd</sup> Feb 1938

Number of Visits 12

39204 on the <sup>Single</sup>  
Twin Triple  
Screw vessel  
Screw vessel**"MYTONGATE"**Tons Gross 410  
Net 215

Built at NEWCASTLE

By whom built CLELANDS (SUCCESSORS) LTD. Yard No. 36 When built 1938

Engines made at COLOGNE

By whom made HUMBOLDT DEUTZ MOTOREN. A.G. Engine No. 43555/56 When made 1937

Donkey Boilers made at

By whom made

Boiler No. When made

Brake Horse Power 300

Owners HULLGATES SHIPPING CO.

Port belonging to HULL

Nom. Horse Power as per Rule 70

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted YES

Trade for which vessel is intended COASTING.

OIL ENGINES, &amp;c.—Type of Engines HEAVY OIL ENGINE 2 or 4 stroke cycle 4 Single or double acting SINGLE

Maximum pressure in cylinders 50 kg/cm<sup>2</sup> Diameter of cylinders 280 mm Length of stroke 450 mm No. of cylinders 6 No. of cranks 6Mean Indicated Pressure 6.6 kg/cm<sup>2</sup> Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 307.5 mm Is there a bearing between each crank YES

Revolutions per minute 300 Flywheel dia. 1250 mm Weight 2600 kg Means of ignition SOLID NUT Kind of fuel used DIESEL OIL

Crank Shaft, dia. of journals as per Rule 164.3 mm as fitted 190 mm Crank pin dia. 170 mm Crank Webs Mid. length breadth 325 mm Mid. length thickness 70 mm Thickness parallel to axis shrunk Thickness around eyehole

Flywheel Shaft, diameter as per Rule 164.3 mm as fitted 190 mm Intermediate Shafts, diameter as per Rule 4 5/8 (117.5 mm) as fitted Thrust Shaft, diameter at collars as per Rule 140 mm as fitted

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 5 3/8 (136.5 mm) as fitted Is the screw shaft fitted with a continuous liner No

Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per rule as fitted 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 or other appliance fitted at the after end of the tube

shaft YES If so, state type AS PER APPROVED PLAN. Length of Bearing in Stern Bush next to and supporting propeller 21.5

Propeller, dia. 5'-9 5/16 Pitch 3'-8 5/16 No. of blades 4 Material BRONZE whether Moveable FIXED Total Developed Surface 11.85 sq. feet

Method of reversing Engines DIRECT Is a governor or other arrangement fitted to prevent racing of the engine when de-clutched YES Means of lubrication

FORCED Thickness of cylinder liners 25 mm Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material LAGGED 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. ONE 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 100 mm Stroke 85 mm Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size ONE 100 x 85 mm How driven MAIN ENGINE ONE 2 1/2" ROTARY BILGE &amp; ONE 3" ROTARY BALL. STARO AUX. DIESEL ENG.

Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

arrangements ALL COOLING WATER DISCHARGED OVERBOARD. MAIN ENGINE 1 GEAR PUMP 1 SPARE.

Ballast Pumps, No. and size ONE 3" ROTARY MAIN ENGINE Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size

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 2 x 2" DIA. 2 x 2 1/2" DIA (DIRECT) In Pump Room

In Holds, &amp;c. 2 x 2 1/2" DIA. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 x 2 1/2" DIA AFT 1 x 2 1/2" DIA. FOR

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes YES Are the Bilge Suctions 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 YES

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

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 BOTH

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

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 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

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 145 x 60 mm Stroke 85 mm Driven by MAIN ENGINE

Auxiliary Air Compressors, No. ONE No. of stages ONE Diameters 3 1/4" Stroke 3 1/4" Driven by STARO AUX. ENG.

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

Scavenging Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule as fitted 3 CYL. 2 3/8" DIA. 1 CYL. 2 3/8" DIA Position 3 CYL. = PORT 1 CYL. = STARBOARD



**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  
**Starting Air Receivers, No.** TWO Total cubic capacity 1000 LITRES Internal diameter 450 mm thickness 12 mm  
Seamless, lap welded or riveted longitudinal joint LAP WELDED Material S.M. STEEL Range of tensile strength 38.9/40.8 Working pressure by Rules  
Kilos/cm<sup>2</sup> Actual 30 Kgs/cm<sup>2</sup>

**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 No, 7.9.36 Receivers No, DUSSELDORF CENT. HEREWITH. Separate Fuel Tanks No, 9.12.36.  
(If not, state date of approval)

Donkey Boilers ✓ General Pumping Arrangements No, 2.9.36 Pumping Arrangements in Machinery Space No, 2.9.36.

Oil Fuel Burning Arrangements ✓

#### SPARE GEAR.

Has the spare gear required by the Rules been supplied YES.

State the principal additional spare gear supplied ✓

The foregoing is a correct description, FOR AND ON BEHALF OF  
CLELANDS (SUCCESSORS) LIMITED.

Manufacturer.

**Dates of Survey while building**  
During progress of work in shops 1937 Sep 30. Oct. 15. 27. 29. Nov. 9. 11. 25. 27. Dec. 8. 15. 20. Feb 3.  
During erection on board vessel ✓  
Total No. of visits 12.

**Dates of Examination of principal parts**—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓  
Crank shaft ✓ Flywheel shaft 30.9.37. Thrust shaft 30.9.37. Intermediate shafts 30.9.37. Tube shaft ✓  
Screw shaft 30.9.37. Propeller 11.11.37. Stern tube 20.10.37. Engine seatings 20.10.37. Engines holding down bolts 30.1.38.

Completion of fitting sea connections 20.10.37. Completion of pumping arrangements 9.11.37. Engines tried under working conditions ✓  
Crank shaft, Material S.M. STEEL Identification Mark LLOYD'S 13190 28.6.37. Flywheel shaft, Material S.M. STEEL Identification Mark LLOYD'S 2576 3.8.37 H.B.  
Thrust shaft, Material S.M. STEEL Identification Mark LLOYD'S 916 3.5.37 L.S. Intermediate shafts, Material S.M. STEEL Identification Marks LLOYD'S N° 40 20.7.37 G.D. 30.9.37.  
Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material S.M. STEEL Identification Mark LLOYD'S N° 39 20.7.37 G.D. 30.9.37.

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 No. 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 vessels CONIDA & HULLGATE.

**General Remarks** (State quality of workmanship, opinions as to class, &c. THE MACHINERY OF THIS VESSEL HAS BEEN BUILT UNDER SPECIAL SURVEY, (SEE DUSSELDORF REPORT N°180 RETURNED HEREWITH), AND HAS NOW BEEN INSTALLED ON BOARD IN ACCORDANCE WITH THE SOCIETY'S RULES & THE APPROVED PLANS. THE WORKMANSHIP & MATERIALS ARE GOOD. THE MACHINERY HAS BEEN SATISFACTORILY TESTED UNDER WORKING CONDITIONS.

THE MACHINERY OF THIS VESSEL IS ELIGIBLE IN OUR OPINION TO BE CLASSED & TO HAVE THE RECORD & LMC 2.38, OIL ENG, QG., IN THE REGISTER BOOK

The amount of Entry Fee .. £ :  
Special ... .. £ :  
Donkey Boiler Fee ... .. £ :  
Travelling Expenses (if any) .. £ :  
When applied for, .. 19.  
When received, .. 19.

Committee's Minute FRI. 18 FEB 1938

Assigned + due 2.38

oil eng QG.

G. Simon & W. Nielsen.  
Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation