

## REPORT ON OIL ENGINE MACHINERY.

No 48413

Received at London Office  
 Date of writing Report 9.3.38 When handed in at Local Office 15 MAR 1938 Port of **HULL**  
 No. in Survey held at **Goole** Date, First Survey 8th November 1937 Last Survey 4th March 1938  
 Reg. Book. 37664 on the **Goole** **COXWOLD** Number of Visits 19  
 Single ☒ Triple ☒ Quadruple ☒ Screw vessel  
 Built at **Goole** By whom built **Goole S.B. & Repg Co. Ltd.** Yard No. 330 When built 1938-3.  
 Engines made at **Glasgow** By whom made **British Auxiliaries** Engine No. 285 When made 1938  
 Donkey Boilers made at **Clyde** By whom made **-** Boiler No. - When made -  
 Brake Horse Power 725. Owners **Atkinson & Brickett Ltd.** Port belonging to  
 Nom. Horse Power as per Rule 125 Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**.  
 Trade for which vessel is intended **Full. Class. not short voyages.**

OIL ENGINES, &c.—Type of Engines **Heavy Oil**—Type **M 44 M 2** or 4 stroke cycle **2** Single or double acting **S.A.**

Maximum pressure in cylinders **782 lbs/sq. in.** Diameter of cylinders **340 mm.** Length of stroke **570 mm.** No. of cylinders **4** No. of cranks **4**  
 Mean Indicated Pressure **99.5 lbs/sq. in.**

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **484 mm.** Is there a bearing between each crank **Yes**.

Revolutions per minute **300** Flywheel dia. **1550 mm.** Weight **2580 kgs.** Means of ignition **Comp.** Kind of fuel used **Heavy oil.**

Crank Shaft, { Solid forged dia. of journals as per Rule **211 mm.** as fitted **235 mm.** Crank pin dia. **235 mm.** Crank Webs Mid. length breadth **346.3 mm.** Thickness parallel to axis **shrunk** Thickness around eyehole **shrunk**  
 { Semi built All built

Flywheel Shaft, diameter as per Rule **211 mm.** as fitted **260 mm.** Intermediate Shafts, diameter as per Rule **137 mm.** (54) as fitted **5 3/4"** Thrust Shaft, diameter at collars as per Rule **144 mm.** as fitted **260 mm.**

Tube Shaft, diameter as per Rule **-** as fitted **-** Screw Shaft, diameter as per Rule **6.25** as fitted **7 7/8"** Is the tube 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 **Newark type** Length of Bearing in Stern Bush next to and supporting propeller **26 1/2"**

Propeller, dia. **85"** Pitch **-** No. of blades **4** Material **Bronze** whether Moveable **Solid** Total Developed Surface **-** sq. feet

Method of reversing Engines **Direct** Is a governor or other arrangement fitted to prevent racing of the engine when declutched **Yes** Means of lubrication

**Forced** Thickness of cylinder liners **25.5 mm.** Are the cylinders fitted with safety valves **Yes** Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material **Yes** If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine **Up funnel.**

Cooling Water Pumps, No. **One 120 mm. x 140 mm. D.A. & Connections to Aux. pumps.** 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. **One** Diameter **90 mm. D.A.** Stroke **140 mm.** Can one be overhauled while the other is at work **-**

Pumps connected to the Main Bilge Line { No. and Size **One D.A. 90 x 140 mm.** { **One Duplex 6" x 6"** { **One Rotary 4 1/2 ton/hr.**  
 How driven **Main Engine** { **Electric Motor** { **Electric Motor**

Is the cooling water led to the bilges **One 1/2" bore pipe from Air Comp. only.** 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 **One Duplex & One Rotary Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size **Two forming part of Main Engine 3,700 gals/hr.****

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 - 3"** In Pump Room **1 & 3" dia.**

In Holds, &c. **Hold 4 @ 3" dia. Fore & Aft Peak One each @ 3" dia. No 1 D.B.T. 3 @ 3" dia. No 2 D.B.T. 2 @ 3" dia. Port & Starboard.**

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **2 @ 3 1/4" dia. (included above)**

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 pipes to the bilges & Suctions **Yes**

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

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 **No**

What pipes pass through the bunkers **Deep pipes through Oil fuel D.B. Tank** 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 **No** 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 **2** Diameters **175 & 70 mm.** Stroke **350 mm.** Driven by **Main Engine**

Auxiliary Air Compressors, No. **One** No. of stages **2** Diameters **4 1/2" & 1 1/2"** Stroke **3 1/4"** Driven by **Hand starting Aux. Engine**

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

What provision is made for first Charging the Air Receivers **Above Aux. Air Comp.**

Scavenging Air Pumps, No. **One** Diameter **4 1/2"** Stroke **350 mm.** Driven by **Main Engine**

Auxiliary Engines crank shafts, diameter as per Rule **See Pops Rpb. No 13792** as fitted **13807 & 13808** No. **1-27 HP.** Position **Port side** Port **Starboard** Driven by **2 & Engine Room**

Have the Auxiliary Engines been constructed under special survey **Yes** Is a report sent herewith **Yes**



