

REPORT ON OIL ENGINE MACHINERY.

No. 97170
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No. in Survey held at Reg. Book. Date, First Survey 27 July 37 Last Survey 15 Feb 1939 Number of Visits 82

on the Single Screw vessel **"BRITISH TENACITY"** Tons ^{Gross} 8439 _{Net} 4855

Built at Newcastle on Tyne By whom built Swan, Hunter & Wigham Richardson Ltd Yard No. 1592 When built 1939-2

Engines made at Sunderland By whom made Wm Duxford & Sons Ltd Engine No. 207 When made 1939

Donkey Boilers made at Newcastle By whom made Swan Hunter & W.R. Ltd Boiler No. 1592 When made 1939

Brake Horse Power 2850 Owners British Tanker Co Ltd Port belonging to London

Nom. Horse Power as per Rule 687 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended ocean going

OIL ENGINES, &c. Type of Engines Dryset Opposed piston See Sunderland Rpt No. 32532. 2 or 4 stroke cycle 2 Single or double acting Single
Maximum pressure in cylinders 570 lbs/sq in Diameter of cylinders 600 mm Length of stroke upper 980 mm lower 1340 mm No. of cylinders 4 No. of cranks 4-three throw
Mean Indicated Pressure 84 lbs/sq in 2320

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge Yes Is there a bearing between each crank Yes
Revolutions per minute 97 Flywheel dia. 700 mm Weight Compressor Temp Kind of fuel used Heavy oil fuel

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

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule 12.85 Thrust Shaft, diameter at collars as per Rule
as fitted as fitted 16 1/2 as fitted

Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule 14.24 Is the tube shaft fitted with a continuous liner Yes
as fitted as fitted 16 1/2 as fitted

Bronze Liners, thickness in way of bushes as per Rule 23.5 Thickness between bushes as per rule 9/16 Is the after end of the liner made watertight in the propeller boss Yes
as fitted 13/16 as fitted 3/4 Yes

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

If two liners are fitted, is the shaft lapped or protected between the liners Yes Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft No
If so, state type flaring Length of Bearing in Stern Bush next to and supporting propeller 5 1/2

Propeller, dia. 16-9 Pitch 12.86 max No. of blades 4 Material hang bronze whether Moveable No Total Developed Surface 91 sq. feet

Method of reversing Engines Compressed air Is a governor or other arrangement fitted to prevent racing of the engine when detached Yes Means of lubrication hand forced
Thickness of cylinder liners See Sunderland Rpt No. 32532 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged

Cooling Water Pumps, No. 1 Main Engine driven Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
Stand-by Steam for distilled water cooling used on M. Engine

Bilge Pumps worked from the Main Engines, No. None Diameter one 10 x 12 x 10 V. Duplex 180 tons/hr & two 7 x 8 x 8 V. duplex 100 tons/hr
Pumps connected to the Main Bilge Line all Steam driven

Is the cooling water led to the bilges Discharges overboard If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements one 10 x 12 x 10 aft in ER
one 8 x 8 x 10 in fore hold Pump Room

Ballast Pumps, No. and size one 10 x 12 x 10 aft in ER Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size one M. Eng driven 100 mm x 610 mm
one Stand by 8 x 7 x 18 Steam

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 of 3 1/2" also 1-2 1/2" from ER Cofferdam & 2-2 1/2" from fore hold gutterway
In Holds, &c. In fore hold 2 of 2 1/2" & 2 of 2" In Pump Room fore 2 of 4" mid 2 of 4"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 of 6"
Are all the Bilge Suction pipes in fore 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 Yes
What pipes pass through the bunkers None How are they protected Yes

What pipes pass through the deep tanks None Have they been tested as per Rule Yes
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 Yes 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 Yes

Main Air Compressors, No. Airless injection No. of stages 3 Diameters 11 1/2-2 3/4" Stroke 7" Driven by Steam Eng.
Auxiliary Air Compressors, No. 2 No. of stages 3 Diameters 11 1/2-9 1/4" & 2 3/4" Stroke 7" Driven by See Glasgow Cert C. 37317.

Small Auxiliary Air Compressors, No. None No. of stages 1 Diameters 1 1/2" Stroke 7" Driven by See Glasgow Cert C. 37317.

Scavenging Air Pumps, No. One Diameter 30 mm Stroke 7" Driven by all in E.Rm
Auxiliary Engines crank shafts, diameter as per Rule No. one 30 Kw Oil Engine Dyno Set Position one 30 Kw Steam Dyno Set
as fitted one 8 Kw Steam Dyno Set on Starboard



