

REPORT ON OIL ENGINE MACHINERY.

No. 1437

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Date of writing Report 18th July 1951 When handed in at Local Office 19 Port of HAMBURG
Survey held at HAMBURG Date, First Survey 30th March 1950 Last Survey 21st Dec. 1950
Number of Visits 55

on the Single Screw vessel Motor Tanker "IRLAND" Gross Tons 10000
Net Tons 3000
Built at Hamburg By whom built Deutsche Werft A.G. Yard No. 235 When built 1950
Lines made at Augsburg By whom made Maschinenfabrik Augsburg-Nürnberg Engine No. 681760/39986-993 When made 1943
Key Boilers made at Hamburg By whom made Deutsche Werft A.G. Boiler No. 361/2/9 When made 1950
Horse Power 5100 Owners A/S Det Danske Franske Dampskibsselskab Port belonging to Copenhagen
Power as per Rule 1170 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
Service for which vessel is intended International

ENGINES, &c. — Type of Engines 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 -
Indicated Pressure - Ahead Firing Order in Cylinders Port 1.8.2.6.4.5.3.7 Span of bearings, adjacent to the crank, measured
inner edge to inner edge - Is there a bearing between each crank - Revolutions per minute -
Flywheel dia. - Weight - Moment of inertia of flywheel (lbs. in² or Kg. cm.²) - Means of ignition Comp. Kind of fuel used -
Crank pin dia. - Crank webs - Mid. length breadth - Thickness parallel to axis -
Mid. length thickness - Thickness around eye-hole -
Main Shaft, diameter as per Rule - as fitted - Intermediate Shafts, diameter as per Rule 255 mm as fitted 260 mm Thrust Shaft, diameter at collars as per Rule approved as fitted 330 mm
Screw Shaft, diameter as per Rule - as fitted - Screw Shaft, diameter as per Rule 282 mm as fitted 298 mm Are the axle shafts fitted with a continuous liner yes

Size of Liners, thickness in way of bushes as per Rule 16.1 mm as fitted 21 x 22 mm Thickness between bushes as per Rule - as fitted 15 mm Is the after end of the liner made watertight in the
after boss yes 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-
combustible - 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 tube shaft no If so, state type - Length of bearing in Stern Bush next to and supporting propeller 1500 mm
Propeller dia. 3800 mm pitch 2660 mm No. of blades 3 Material Bronze whether moveable solid Total developed surface 4,413 sq. feet
Moment of inertia of propeller (lbs. in² or Kg. cm.²) as approved Kind of damper, if fitted -
Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of
operation forced Thickness of cylinder liners 40 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled
and 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
to the engine - Cooling Water Pumps, No. 5 SW 3 FW Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
Pumps worked from the Main Engines, No. 2 Diameter 165/120 mm Stroke 150 Can one be overhauled while the other is at work yes
Pumps connected to the Main Bilge Line (No. and size 2 - 10 TPH - 1 at 50 TPH - 1 at 85 TPH How driven M.E. attached Steam Steam
Is 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 -

Oil Pumps, No. and size 1, 210x210x350 (85 TPH) Main engine One each engine
Power Driven Lubricating Oil Pumps, including spare pump, No. and size 90 cb. m. per hour 4.15 RPM.
1 Steam dr. 270x220x350 (75 m³/h.)
Two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both main bilge pumps and auxiliary
pumps, No. and size:—In machinery spaces 5 at 80 mm In pump room Forw. 1, a 65 mm bore
Aft 5, a 80 mm bore
Independent Power Pump Direct Suctions to the engine room bilges, No. and size 1x125 (ballast P.) 1x125 (bilge P.) 1x180 (Cooling W.P.)
Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes yes Are the bilge suction pipes 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 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 yes
Do pipes pass through the bunkers - How are they protected -
Do 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 none Is it fitted with a watertight door - worked from -
If the vessel is 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. - No. of stages - diameters - stroke - driven by -
Auxiliary Air Compressors, No. 2 No. of stages 2 diameters 250 / 100 stroke 200 driven by 1 steam
All Auxiliary Air Compressors, No. none No. of stages - diameters - stroke - driven by 1 diesel engine
Is provision made for first charging the air receivers Steam driven compressor
Ventilating Air Pumps, No. One each engine Rotary Type no Output 434 cub. m. p. hour driven by main engines
Auxiliary Engines crank shafts, diameter as per Rule approved as fitted 130 mm No. one Position Port side of E.R. forward
Have the auxiliary engines been constructed under special survey yes Is a report sent herewith yes

