

# REPORT ON OIL ENGINE MACHINERY.

No. 10924

JUN 15 1939

Date of writing Report 6/6 1939 When handed in at Local Office 12/6 1939 Port of Copenhagen  
 No. in Survey held at Copenhagen & Odense Date, First Survey 8/9 1938 Last Survey 22/5 1939  
 Reg. Book. 88522 on the Single } Screw vessel "INGE MÆRSK" Tons Gross 9396.77  
Triple }  
Quadruple } Net 5819.19  
 Number of Visits 47

Built at Odense By whom built Odense Haaskibsværft Yard No. 78 When built 1939  
 Engines made at Copenhagen By whom made A/S Burmeister & Wain Engine No. 2857 When made 1939  
 Donkey Boilers made at Elsinor By whom made A/S Helsingørsk Jern- & Maskinfabrik Boilers No. 733-4 When made 1939  
 Brake Horse Power 3800 Owners A/S O/S "SVENDBORG" OG "O/S AF 1912" Port belonging to Copenhagen  
 Nom. Horse Power as per Rule 572 Is Refrigerating Machinery fitted for cargo purposes 1/0 Is Electric Light fitted yes  
 Trade for which vessel is intended Open sea, oil carrier.

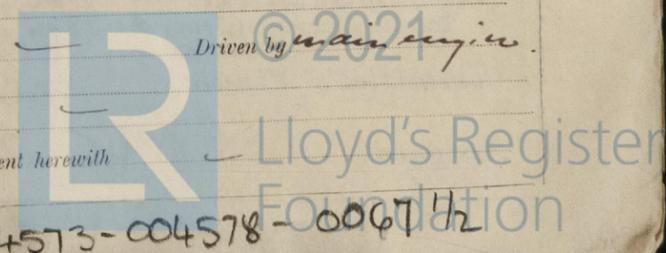
**OIL ENGINES, &c.** Type of Engines Diesel, crosshead type, solid injection 2 or 4 stroke cycle 4 Single or double acting single  
 Maximum pressure in cylinders 49 kg/cm<sup>2</sup> Diameter of cylinders 740 mm Length of stroke 597 mm No. of cylinders 7 No. of cranks 7  
 Mean Indicated Pressure 8.5 kg/cm<sup>2</sup> Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1004 mm Is there a bearing between each crank yes  
 Revolutions per minute 105-110 Flywheel dia. 2360 mm Weight 25 Means of ignition compression Kind of fuel used heavy oil  
 Crank Shaft, Solid forged dia. of journals as per Rule 501 mm Crank pin dia. 525 mm Crank Webs shrunk Mid. length breadth 1000 mm Thickness parallel to axis 310 mm  
Semi built as fitted 525 mm (170 mm CENT. HOLE) Mid. length thickness 310 mm Thickness around eye-hole 280 mm  
All built  
 Flywheel Shaft, diameter as per Rule 356 mm Intermediate Shafts, diameter as fitted 560 mm Thrust Shaft, diameter at collars as per Rule 374 mm  
as fitted as fitted 560 mm as fitted 500 mm  
 Tube Shaft, diameter as per Rule 393 mm Is the tube shaft fitted with a continuous liner yes  
as fitted as fitted 560 mm as fitted 500 mm

Bronze Liners, thickness in way of bushes as per Rule 19.0 mm Thickness between bushes as per Rule 14.3 mm Is the after end of the liner made watertight in the propeller boss yes  
as fitted 28.0 mm as fitted 20.0 mm  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner on 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 yes  
 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 yes Length of Bearing in Stern Bush next to and supporting propeller 1750 mm  
 Propeller, dia. 5330 mm Pitch VARIABLE No. of blades 4 Material BRONZE whether Moveable No Total Developed Surface 10.6 sq. feet

Method of reversing Engines direct reverse Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication forced  
 Thickness of cylinder liners 53.5 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 1 OFF 2 CYL. DIFF. PUMP 140 T/H  
 Cooling Water Pumps, No. 2 230-260-250 mm DUPL. 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 165 mm Stroke 230 mm Can one be overhauled while the other is at work yes  
 Pumps connected to the Main Bilge Line No. and size 1 OFF 165-230 mm / 1 OFF 230-260-250 mm DUPL. / 1 OFF 150-150-150 mm DUPL.  
How driven BY MAIN ENGINE STEAR STEAR  
 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 1 OFF 2 CYL. DIFF. P. 140 T/H

Ballast Pumps, No. and size 1 OFF 230-250-260 mm DUPL. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 230-260-250 mm DUPL.  
 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 5 OFF 3"  
 In Holds, &c. COFFERS AFT: 1 OFF 6" FORE HOLD: 2 OFF 3" FORW. COFFERS: 1 OFF 4"  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 OFF 3" 2 OFF 4" 1 OFF 5"  
 Are all the Bilge Suction pipes in Holds and Panel 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 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 yes  
 What pipes pass through the bunkers yes How are they protected yes  
 What pipes pass through the deep tanks yes 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 no tunnel Is it fitted with a watertight door yes worked from yes  
 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. 1 No. of stages 2 Diameters 2.8 m<sup>3</sup> per min Stroke 178 mm Driven by steam  
 Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 2.8 m<sup>3</sup> per min Stroke 178 mm Driven by steam  
 Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 2.8 m<sup>3</sup> per min Stroke 178 mm Driven by steam  
 What provision is made for first Charging the Air Receivers yes  
 Scavenging Air Pumps, No. 1 CAPACITY 178 m<sup>3</sup> per min Stroke 178 mm Driven by main engine  
 Auxiliary Engines crank shafts, diameter as per Rule Position as fitted  
 Have the Auxiliary Engines been constructed under special survey yes Is a report sent herewith yes



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