

REPORT ON OIL ENGINE MACHINERY.

No. 2158

DEC -4 1939

Received at London Office

Date of writing Report 12th Sept 1939. When handed in at Local Office 27. 9. 1939 Port of Bremen
No. in Survey held at 147/11 Reg. Book. 32-8
Date, First Survey 23rd June 1939 Last Survey 15th Sept 1939
Number of Visits 25

Single on the Twin Triple Screw vessel "EMINENT"
Built at Marsdenhook By whom built Messrs. Schifferwerdt 3 Builders Yard No. 511630 When built
Engines made at Augsburg By whom made Messrs. M. G. M. Engine No. (When made 1939)
Donkey Boilers made at By whom made Boiler No. - When made -
Brake Horse Power 400 Owners Kapitein de Winter Port belonging to Groningen
Nom. Horse Power as per Rule 97.8 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
Trade for which vessel is intended 11 1/4" 16 9/16"

IL ENGINES, &c. Type of Engines 98 Vn 42 2 or 4 stroke cycle 4 Single or double acting single
Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 285 mm Length of stroke 420 mm No. of cylinders 8 No. of cranks 8
Mean Indicated Pressure 6.8
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 352/354 mm Is there a bearing between each crank yes
Revolutions per minute 300 Flywheel dia. 1200 mm Weight 800 kgs Means of ignition dis. ign. Kind of fuel used
Crank Shaft, { Solid forged as per Rule
Semi built dia. of journals as fitted 125 mm Crank pin dia. 175 mm Crank Webs Mid. length breadth 280 mm Thickness parallel to axis
All built as fitted 125 mm Mid. length thickness 89.5 mm Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted
Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the { tube screw } shaft fitted with a continuous liner {
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 If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet

Method of reversing Engines by hand Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication
forced Thickness of cylinder liners 20 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with
non-conducting material w. covered 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. 1, 18.7 m³/h Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Bilge Pumps worked from the Main Engines, No. 1 Diameter 105 mm Stroke 120 mm Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line { No. and Size
How driven
Is the cooling water led to the bilges 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 Main engine Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2, 5.24 m³/h
Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size: - In Machinery Spaces In Pump Room

In Holds, &c. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes 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

Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel 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

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

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 80/(80-70) mm Stroke 80 mm Driven by main engine
That provision is made for first Charging the Air Receivers

Scavenging Air Pumps, No. Diameter Stroke Driven by
Auxiliary Engines crank shafts, diameter as per Rule as fitted No. Position
Have the Auxiliary Engines been constructed under special survey Is a report sent herewith

BELONGS TO GRONINGEN Rpt No. "EMINENT" VESSEL'S NAME.

AIR RECEIVERS:—Have they been made under survey ☒ Are reports or certificates now forwarded ☒
Is each receiver, which can be isolated, fitted with a safety valve as per Rule ☒
Can the internal surfaces of the receivers be examined and cleaned ☒ Is a drain fitted at the lowest part of each receiver ☒
Injection Air Receivers, No. ☒ Cubic capacity of each ☒ Internal diameter ☒ thickness ☒
Seamless, lap welded or riveted longitudinal joint ☒ Material ☒ Range of tensile strength ☒ Working pressure ☒
Starting Air Receivers, No. ☒ Total cubic capacity ☒ Internal diameter ☒ thickness ☒
Seamless, lap welded or riveted longitudinal joint ☒ Material ☒ Range of tensile strength ☒ Working pressure ☒

IS A DONKEY BOILER FITTED? ☒ 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 Shifting ☒ 25th Jan. 1939. Receivers 25th Jan 1939 Separate Fuel Tanks ☒
(If not, state date of approval)

Donkey Boilers ☒ General Pumping Arrangements ☒ Pumping Arrangements in Machinery Space ☒
Oil Fuel Burning Arrangements ☒

SPARE GEAR.

Has the spare gear required by the Rules been supplied ☒ yes
State the principal additional spare gear supplied ☒ as per Rules.

Note: The air receivers as per drawing above shall be delivered by the owners in Holland themselves.

The foregoing is a correct description.
Maschinenfabrik Augsburg-Nürnberg A.G.

Dr. H. H. Müller

Manufacturer.

Dates of Survey while building
During progress of work in shops-- 1939. June 22, 28, 30. July 4, 10, 11, 13, 28, 29, 31. Aug. 1, 2, 7, 8, 9, 10, 11.
During erection on board vessel-- September 6, 7, 8, 11, 12, 13, 14, 15.
Total No. of visits 25

Dates of Examination of principal parts—Cylinders 4-7-39. Covers 23-6-39. Pistons 29-7-39. Rods ☒ Connecting rods 29-7-39
Crank shaft 28-7-39. Flywheel shaft ☒ Thrust shaft ☒ Intermediate shafts ☒ Tube shaft ☒
Screw shaft ☒ Propeller ☒ Stern tube ☒ Engine seatings ☒ Engines holding down bolts ☒
Completion of fitting sea connections ☒ Completion of pumping arrangements ☒ Engines tried under working conditions ☒
Crank shaft, Material S. M. steel Identification Mark 5432-6732 Flywheel shaft, Material ☒ Identification Mark ☒
Thrust shaft, Material ☒ Identification Mark H.J. 6-6-39 Intermediate shafts, Material ☒ Identification Marks ☒
Tube shaft, Material ☒ Identification Mark ☒ Screw shaft, Material ☒ Identification Mark ☒

Is the flash point of the oil to be used over 150° F. ☒
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with ☒
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ☒ 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 vessel Standard type of heavy oil engine of makers.

General Remarks (State quality of workmanship, opinions as to class, &c.)

This heavy oil main engine has been constructed under special survey in accordance with the Society's Rules and Regulations, as well as with the approved plans and instructions thereto. The material used in the construction is good, and the workmanship satisfactory. This main engine has been tested on the makers' test bed during several hours, running under full load, 10% overload, and part loads in the presence of the undersigned, and was found to be in safe working condition during these trials. After the trials the engine has been opened up for inspection, and all parts were found in order.

In our opinion, the vessel for which this engine is intended will be eligible for the notation of + L.M.C. (with date) when the whole machinery has been fitted satisfactorily on board, and tried under full working conditions.

The amount of Entry Fee 1/2. P. 26:67 : When applied for,
Special ... 2326:67 : 27.9.1939
Test bed trial ...
Donkey Boiler Fee ... 2 63:00 :
Travelling Expenses (if any) 2 50:66 :
When received,
Payment
absorbed

MR. H. H. Müller
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

See G. 7. C. 86



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Foundation