

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office - 6 AUG 1941

Writing Report 11th July 1941 When handed in at Local Office 31st July 1941 Port of Manchester  
 Survey held at Manchester Date, First Survey 20th February Last Survey 8th July 1941  
 Book. S.S.S.S. "MODLIN" ex "WILJA" (Number of Visits 21)  
 at Hamburg By whom built Hamburgischer Schiffbau Gesellschaft Yard No. ✓ Tons ✓  
do By whom made do Engine No. ✓ When built 1906  
 made at Havre (main) By whom made Ateliers de Reparations Maritimes Boiler No. ✓ when made 1926  
do Behard Highton & Co  
 rated Horse Power 307 Owners Polish Government Port belonging to do  
 Horse Power as per Rule 307 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes  
 for which Vessel is intended ✓

**ENGINES, &c.—Description of Engines** Triple expansion steam reciprocating engines Revs. per minute ✓  
 Cylinders 20-63-34-84-61-02 Length of Stroke 39.37 No. of Cylinders 3 No. of Cranks 3  
 shaft, dia. of journals as per Rule 11.35" Crank pin dia. 12" Crank webs Mid. length breadth ✓ Thickness parallel to axis 7 5/8" (HP 7 1/8")  
 as fitted 12.00 Mid. length thickness ✓ Thickness around eye-hole 4 13/16"  
 Intermediate Shafts, diameter as per Rule 10.82" Thrust shaft, diameter at collars as per Rule 11.35"  
 as fitted 11.50" as fitted 11.625"  
 Shafts, diameter as per Rule ✓ Screw Shaft, diameter as per Rule 12.14" Is the tube shaft fitted with a continuous liner yes  
 as fitted ✓ as fitted 13.51" as fitted 0.50"  
 Liners, thickness in way of bushes as per Rule 0.68" Thickness between bushes as per Rule 0.50" Is the after end of the liner made watertight in the  
 as fitted 0.69" as fitted ✓ boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of 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 ✓  
 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 ✓  
no If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller ✓  
 Propeller, dia. 15'10" Pitch 13'5" No. of Blades 4 Material Cast Iron whether Moveable yes Total Developed Surface 74.5 sq. feet  
 Pumps worked from the Main Engines, No. 2 Diameter 3.54" Stroke 25.2" Can one be overhauled while the other is at work yes  
 Pumps worked from the Main Engines, No. 2 Diameter 3.54" Stroke 25.2" Can one be overhauled while the other is at work yes  
 No. and size One Duplex 7 1/2 x 5 x 6 One Single One Duplex 6 x 7 1/2 x 6 One Single 7 1/2 x 10 3/8  
 How driven Indep Steam Engines Main Bilge Line Main Eng. Indep Steam Eng. x 9"  
 Pumps, No. and size One duplex, one single, see bilge pumps Lubricating Oil Pumps, including Spare Pump, No. and size ✓  
 independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary  
 pumps;—In Engine and Boiler Room 2 at 3" (1 port, 1 starboard) One flexible hose. Tunnel well 1 @ 2 3/4"  
 &c. N°1 & 2 hold 3" P&S, N°3 hold 3" P&S, N°4 hold 3" P&S. Dry space below after peak 1 @ 2 3/4"  
 Water Circulating Pump Direct Bilge Suctions, No. and size One at 5 1/4" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 size One at 4" port side. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes STRUMS yes  
 Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes  
 Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks yes  
 placed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Overboard Discharges above or below the deep water line below  
 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  
 pipes pass through the bunkers none How are they protected ✓  
 pipes pass through the deep tanks ✓ Have they been tested as per Rule ✓  
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes  
 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 yes worked from top grating E.R.

**BOILERS, &c.—** (Letter for record ✓) Total Heating Surface of Boilers 4200 sq. ft  
 Draft fitted yes No. and Description of Boilers 2 Scotch type Working Pressure 200 lbs"

REPORT ON MAIN BOILERS NOW FORWARDED? yes  
 DONKEY BOILER FITTED? yes If so, is a report now forwarded? no. See survey report attached

Are approved plans forwarded herewith for Shafting no Main Boilers no Auxiliary Boilers ✓ Donkey Boilers no  
 (If not state date of approval) Particulars submitted for approval herewith ✓  
 General Pumping Arrangements no Oil fuel Burning Piping Arrangements ✓

**E.G.E.A.R.** State the articles supplied:—  
Rule spare gear for ocean going vessels on board.

The foregoing is a correct description,  
 ✓

Manufacturer.



© 2019  
 Lloyd's Register  
 Foundation

W192-0080

During progress of work in shops - -

Dates of Survey while building

During erection on board vessel - - -

Total No. of visits 21 (E & B)

Dates of Examination of principal parts—Cylinders 22-4-41, 23-4-41 Slides 22-4-41 (H.P. only) Covers 22-4-41 & 23-4-41

Pistons 22-4-41, 23-4-41 Piston Rods Connecting rods 23-4-41

Crank shaft 22-4-41, 23-4-41 Thrust shaft 22-4-41 Intermediate shafts 22-4-41

Tube shaft Screw shaft 18-4-41 Propeller 18-4-41

Stern tube 18-4-41 Engine and boiler seatings 2-7-41 Engines holding down bolts 2-7-41

Completion of fitting sea connections Examined 17-4-41 Engines tried under steam 7-7-41

Completion of pumping arrangements Jerted 18-6-41 Boilers fixed Thickness of adjusting washers Port B, P 7/32 S 9/32 Star B, P 5/16 F S 5/16

Main boiler safety valves adjusted 18-6-41

Crank shaft material Identification Mark Thrust shaft material Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material S.D. Copper Test pressure 400 lb Date of Test 16-6

Is an installation fitted for burning oil fuel no Is the flash point of the oil to be used over 150°F.

Have the requirements of the Rules for the use of oil as fuel been complied with

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo no If so, have the requirements of the Rules been complied with

Is this machinery duplicate of a previous case no If so, state name of vessel

**General Remarks** (State quality of workmanship, opinions as to class, &c.) Plans of the machinery of this vessel are not available. Accordingly all relevant dimensions have been measured and the sizes of the existing shafting are found to be the requirements of the Rules. Calculations are submitted herewith. There are no test results available for the materials used in the construction of this machinery but it is known that the vessel was built class with the Germanischer Lloyd.

The existing pumping arrangements are considered to be acceptable. Details are submitted herewith for consideration.

The machinery has been opened out as detailed in the accompanying report, examined and found sound and free from defects. Main and auxiliary machinery have been tested under steam and to operate satisfactorily.

Bilge pumping arrangements throughout the vessel have been tested and found efficient.

The machinery of this vessel is eligible, in my opinion, to be classed in the Society's Register Book and to receive the notation L.M.C.-7,41 when the Special Survey has been completed.

Certificate to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute.

|                                    |   |   |                   |
|------------------------------------|---|---|-------------------|
| The amount of Entry Fee ... £      | : | : | When applied for, |
| Special ... £                      | : | : | 10                |
| Donkey Boiler Fee ... £            | : | : | When received,    |
| Travelling Expenses (if any) ... £ | : | : | 19                |

*Handwritten: 5-8-41*

*W. J. Ferguson*  
Engineer Surveyor to Lloyd's Register of Shipping

TUE, 12 AUG 1941

Committee's Minute

Assigned

*See Arch. Rpt. 10607*



© 2019 Lloyd's Register Foundation