

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

13668

Approved
Plans required
7/7

1st June 1943
Gothenburg

16th June 43 Port of Gothenburg 2 JUL 1943

Date First Survey 4th Nov. 41. Last Survey 2nd June 1943.

No. in Survey held 2
88385
s/s 'RUDOLF'

Built at Gothenburg By whom made A. Lindholmens Varv

Yard No. 973 Tons 1968.51
When built 1943.

Engines made at - By whom made - Engine No. 1267 When made 1943.
Boilers made at - By whom made - Boilers Nos 2640/41 When made 1942.

Registered Horse Power 1250 IHP @ 102 RPM Owners Rederi A.B. Bifrost Port belonging to Gothenburg.
Nom. Horse Power as per Rule 194.0 190 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.

Trade for which Vessel intended General.

ENGINES, 436, 640, 1170 Triple expansion steam eng. with turbo compressor Revs. per minute 97.
Dia. of Cylinder 17 3/16 - 25 3/16 - 46 1/16 Length of Stroke 33 1/2 - 33 7/8 No. of Cranks 3
Crank shaft, dia. of journals Approved 254 mm. Crank pin dia. 254 mm. Crank web. Mid. length thickness 254 mm.
Intermediate Shafts, diameter as fitted 245 mm. Thrust shaft, diameter at collars as fitted 254 mm.

Tube Shafts, diameter as fitted 284 mm. Screw Shaft, diameter as fitted 384 mm. Is the screw shaft fitted with a continuous liner? Yes.
Bronze Liners, thickness in way of bushes as per Rule 16.2 mm. Thickness between bushes as fitted 16.5 mm. Is the after end of the liner made watertight in the propeller boss? 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? fits tightly.
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.

Propeller, dia. 3900 mm. Pitch 3615 mm. No. of Blades 4 Material Steel whether Movable No. Total Developed Surface 4.78 sq. ft.
Feed Pumps worked from the Main Engines, No. 2 Diameter 70 mm. Stroke 420 mm. Can one be overhauled while the other is at work? Yes.
Bilge Pumps worked from the Main Engines, No. 2 Diameter 90 mm. Stroke 420 mm. Can one be overhauled while the other is at work? Yes.

Feed Pumps (No. and size 2 piston 18 1/4 1 piston 14 1/4 1 injector 7.5 1/2) Pumps connected to the Main Bilge Line (No. and size 2 plunger pumps 22 1/4 1 ballast piston 138 1/4 1 piston 129 1/4)
How driven Main engine Steam Main Bilge Line Steam Main engine Steam
Ballast Pumps, No. and size One 138 1/4 Lubricating Oil Pumps, including Spare Pump, No. and size One for the turbo compressor only.

Are two independent means arranged for circulating water through the Oil Cooler? Oil cooler only for turbo sections, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps.
Bilge Pumps, In Engine and Boiler Room 3 1/2 2 1/2 In Holds, etc. No. 1 hold = two 3" No. 2 hold = two 3"

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 5 1/2 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 3 1/2 to ballast pumps.
Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes? Yes.

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight drain pipes to the bilges? Yes.
Are all Sea Connections fitted direct on the skin of the ship? Fitted on cast iron stands. Are they fitted with Valves or Cocks? Yes.
Are they fixed sufficiently high on the ship's side to be seen without lifting the stowhold 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? None. 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? 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? Engine aft. Is it fitted with a watertight door? - worked from -

MAIN BOILERS, &c. (Letter for record S.) Total Heating Surface of Boilers 220 m² = 2368 ft²
Is Forced Draft fitted? Yes. No. and Description of Boilers 2 horizontal multitubular Working Pressure 220 lbs/sq. in.
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.

IS A DONKEY BOILER FITTED? No. 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 Shafting 10.7.41. Main Boilers 8.4.41. Auxiliary Boilers - Donkey Boilers -
(If not state date of approval) Superheaters 1.9.41. General Pumping Arrangements 24.9.42. Oil fuel Burning Piping Arrangements -

SPARE GEAR.
Has the spare gear required by the Rules been supplied? Yes, with exception of spare propeller which will be fitted later.
State the principal additional spare gear supplied.

The foregoing is a correct description.

Manufacturer.



© 2021

Lloyd's Register Foundation

010219-010228-0131

4/11 1941 - 25/5 1943.

Date of Survey while building
During erection on board vessel
Total No. of visits 70

16/2 1943 - 2/6 1943.

Dates of Examination of principal parts: Cylinders 4/10 3/11 18/11 24/11 8/12 1942 slides 4/10 3/11 1942. Covers 4/10 3/11 1942.
Pistons 3/11 42. Piston rods 2/3 43. Connecting rods 2/3 43.
Crank shaft 23/12 41; 6/11 42. Thrust shaft 1/2 43. Intermediate shafts 5/4 43.
Tube shaft - Screw shaft 20/10 30/11 42. Propeller 11/11 42.
Stern tube 24/10 42. Engine and boiler settings 23/12 42. 15/3 43.
Completion of fitting sea connections 15/2 43.
Completion of pumping arrangements 3/5 43. Boiler fixed 26/4 43. Engines tried under steam 24/5 2/6 43.
Main boiler safety valves adjusted 28.5.43. Thickness of adjusting washers lock nuts.
Crank shaft material S.M. Steel Identification LLOYD'S 6449/456 23/12/41 LLOYD'S 6505 21.5.42 Thrust shaft material S.M. Steel Identification LLOYD'S No 3471 5.4.43
Intermediate shafts, material S.M. Steel Identification Marks LLOYD'S 1093 30.11.42 Tube shaft, material - Identification -
Screw shaft, material S.M. Steel Identification Marks LLOYD'S 1093 30.11.42 Steam Pipes, material S.M. Steel Test pressure 50 kg/cm² Date of 29/5-5/5 43.
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 ✓
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with Yes. ✓
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, etc.) The main engine of this vessel has been built under Special Survey and all the requirements of the Rules have been complied with. The dimensions are as specified and in accordance with the approved plans. The shafting - as per forging reports attached - The workmanship is good. The turbo-compressor is manufactured by Messrs. A.B. Götaaverken of this port as per certificates attached. The boilers as per separate report now sent.

The machinery has been tested under working conditions on a trial trip and found to work satisfactorily.

These documents will be forwarded when postal communications permit.

The machinery of this vessel is eligible in my opinion to be classed in the Register Book with notation of ~~L~~ LMC 6.43 subject to spare propeller of cast steel or other approved material being placed on board.

The amount of Entry Fee KR 57:00
Special Add. fee for F.W. boilers KR 921:50
Boiler Fee KR 168:50
Travelling Expenses (if any) £

When applied for, 10th June 1943
When received, 18.

Sten Jansson
Engineer, Göteborg, Sweden

Committee's Minute

TUES. 20 JUL 1943

Assigned

+ LMC 6.43 subject
J.D. L.



© 2021

Lloyd's Register Foundation