

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 10 SEP 1927

Date of writing Report 4 Sept. 1927 When handed in at Local Office 10 Port of Rotterdam  
 Date, First Survey 8 Oct 1926 Last Survey 6 Sept. 1927  
 (Number of Visits 53)  
 Tons { Gross 3000  
 Net 2163  
 on the S.S. Cottica  
 Built at Rotterdam By whom built Messrs P. Smit Yard No. 410 When built 1927  
 Engines made at Rotterdam By whom made Messrs P. Smit Engine No. 423 when made 1927  
 Boilers made at Rotterdam By whom made Messrs P. Smit Boiler No. 518/519 when made 1927  
 Registered Horse Power 1900 Owners Kon. Ned. Stoom. Ma. Port belonging to Amsterdam  
 Nom. Horse Power as per Rule 305 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which Vessel is intended General Trade

ENGINES, &c. 22 1/2" 36 1/2" & 59 1/2" Description of Engines Vertical Triple Exp. Compound Revs. per minute 90  
 Dia. of Cylinders 560-920-1500 Length of Stroke 1100 No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule Crank pin dia. 315 Crank webs 200 Mid. length breadth 200 Thickness parallel to axis 232.5  
as fitted 315 Crank pin dia. 315 Crank webs 440 Mid. length thickness 440 Thickness around eye-hole 142.5  
 Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collars as per Rule  
as fitted 298 Thrust shaft, diameter at collars as fitted 315  
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule Is the { tube } shaft fitted with a continuous liner Yes  
as fitted Screw Shaft, diameter as fitted 330 Is the { screw } shaft fitted with a continuous liner Yes  
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the  
as fitted 2.5-2.2 Thickness between bushes as fitted 2.0 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 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 1500

Propeller, dia. 4343 Pitch 4343 No. of Blades 4 Material Bronze whether Moveable Solid Total Developed Surface 604 feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 05 Stroke 550 Can one be overhauled while the other is at work Yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 05 Stroke 550 Can one be overhauled while the other is at work Yes  
 Feed Pumps { No. and size 2; 4" x 9 1/2" x 21" Pumps connected to the { No. and size 2; 140 x 130 x 225 & 100 x 210 x 250  
 How driven Steam Driven Main Bilge Line { How driven Steam Driven  
 Ballast Pumps, No. and size 1; 100 x 210 x 250 Lubricating Oil Pumps, including Spare Pump, No. and size 2  
 Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps; - In Engine and Boiler Room 5 a 2 3/4"  
 in Holds, &c. No 1 hold 2 a 2 3/4"; No 2 hold 2 a 2 3/4" No 3 hold 2 a 2 3/4" No 4 hold 2 a 2 3/4"  
tunnel well 1 a 2 3/4"; 1 a 2 3/4" from Cofferdam between No 4 and No 5 tank.  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 a 6 3/4" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 No. and size 1 a 6 3/4" 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 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 and Cocks  
 Are they fixed 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  
 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  
 How are they protected Yes  
 Have they been tested as per Rule Yes

What Pipes are carried through the bunkers Yes  
 What pipes pass through the deep tanks 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 Yes Is it fitted with a watertight door Yes worked from top grating

MAIN BOILERS, &c. - (Letter for record 2) Total Heating Surface of Boilers 5920 sq. ft.  
 Is Forced Draft fitted Yes No. and Description of Boilers 2 Single Ended Working Pressure 14.44 lbs. G.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes  
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? Yes

PLANS. Are approved plans forwarded herewith for Shafting 7/10/26 Main Boilers 6/10/26 Auxiliary Boilers Yes Donkey Boilers Yes  
 (If not state date of approval)  
 Superheaters Yes General Pumping Arrangements 2/11/26 Oil fuel Burning Piping Arrangements 26/1/27

SPARE GEAR. State the articles supplied:-  
Complete set of piston rings for the H.P. M.P. and L.P. pistons.  
2 Sets crosshead brasses with bolts and nuts.  
1 Set crankpin brasses with bolts and nuts.  
4 Main bearing bolts.  
1 Set shaft coupling bolts  
1 Set of feed and Bilge pump valves.  
A quantity of assorted bolts and nuts.  
1 Stern shaft.  
1 Cast iron propeller.  
Further as per attached list.

The foregoing is a correct description,

MACHINEFABRIEK & SCHEEPSWERF

van P. SMIT Jr.

Manufacturer.

*[Signature]*



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Lloyd's Register Foundation

002653-002658-0160

1486 Oct 8; Nov: 15-25-30; Dec 22; 1927 Jan 4-19-20  
 During progress of work in shops - - - Feb: 16-20; March 15-22-25-28-30; April 5-11-14-15-  
 Dates of Survey while building - - - During erection on board vessel - - - 26-28-30 May 3-9-17-19-20-23-25-28 June 1-4-6  
 - 13-20-22-27-30 July 5-7-20-29 Aug 3-4-5-9-11-16-22  
 Total No. of visits 53. 13-26 Sept 6

Dates of Examination of principal parts - Cylinders 16/2/27; 28/2/27; 15/3/27; 22/3/27; 28/3/27; 5/4/27; 22/4/27; 28/4/27  
 Slides 22/2/27; 28/2/27; 5/3/27; 22/3/27; 28/3/27; 5/4/27; 22/4/27; 28/4/27  
 Covers 22/2/27; 28/2/27; 5/3/27; 22/3/27; 28/3/27; 5/4/27; 22/4/27; 28/4/27  
 Pistons 19/2/27; 28/2/27; 5/3/27 Piston Rods 16/2/27; 28/2/27; 19/3/27; 22/3/27; 28/3/27; 5/4/27; 22/4/27; 28/4/27  
 Connecting rods 19/2/27; 28/2/27; 5/3/27; 22/3/27; 28/3/27; 5/4/27; 22/4/27; 28/4/27  
 Crank shaft 5/4/27; 14/4/27 Thrust shaft 5/4/27; 14/4/27 Intermediate shafts 5/4/27; 14/4/27; 3/5/27  
 Tube shaft - Screw shaft 5/4/27; 14/4/27; 26/4/27 Propeller 29/7/27  
 Stern tube 29/7/27 Engine and boiler seatings 3/5/27; 9/5/27 Engines holding down bolts 9/5/27; 17/5/27  
 Completion of pumping arrangements 3/8/27 Boilers fixed 9/5/27 Engines tried under steam 4/8/27 - 6/9/27  
 Main boiler safety valves adjusted 5/8/27 Thickness of adjusting washers Port 7/8 - 7/8 in Starboard 6/8 - 7/8 in  
 Crank shaft material S.M. Steel Identification Mark 13-12-26 Thrust shaft material S.M. Steel Identification Mark 13-12-26  
 Intermediate shafts, material S.M. Steel Identification Marks V.S. 635/638 Tube shaft, material - Identification Mark -  
 Screw shaft, material S.M. Steel Identification Mark 16-2-27 Steam Pipes, material Steel Test pressure 400 lb Date of Test 28/4/27  
 Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes  
 Have the requirements of the Rules for carrying and burning oil fuel 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, &c.) The Machinery has been made in accordance with the Society's rules, approved plans and Secretary letters. Material tested as required and workmanship good. The whole was found in a good working condition during the trial trip on the north coast from the Hook of Holland towards Ymuiden and I am of opinion that this vessel is eligible to be recorded in the Society's Register Book with **F.L.M.C. 9-27** fitted for burning oil fuel. Flash point above 150°F. C.L.

It is submitted that this vessel is eligible for THE RECORD. + LMC 9. 27. FD. CL. Fitted for oil fuel 9. 27. FP. above 150°F.

J.W.D.  
 12/9/27  
 Y. Young  
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 60.00 :  
 Special ... £ 993.00 :  
 Donkey Boiler Fee ... £ :  
 Travelling Expenses (if any) £ 34.50 :  
 When applied for, 2/9 1927  
 When received, 14.9.27

Committee's Minute TUES. 20 SEP 1927

Assigned + L.M.C. 9: 27 F.D. CL. Fitted for Oil Fuel 9: 27 F.P. above 150°F.

