

List of

Rpt. 4.

No. 25436

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office APR 12 1937

Date of writing Report 8-4-1937 When handed in at Local Office 10 Port of Rotterdam  
 No. in Survey held at Bolnes Date, First Survey 4-12-36 Last Survey 23-3-1937  
 Reg. Book. on the steel tug "UPEST" (twin screws) (Number of Visits 9)  
 Built at Bolnes By whom built Boele's Machf. Scheepwerf Yard No. 862 Tons 1937  
 Engines made at Hamburg By whom made Reihardt's Machfab. Engine No. ? When made 1924  
 Boilers made at Veendam By whom made Veendam's Machfab. Boiler No. 1800 When made 1924  
 Registered Horse Power Owners W. Verening de Scheep. Mij. Port belonging to 5 Govenhage  
 Nom. Horse Power as per Rule 66.5 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes  
 Trade for which Vessel is intended 10<sup>5</sup>/<sub>8</sub> 20<sup>1</sup>/<sub>16</sub> - 14<sup>3</sup>/<sub>16</sub>

**ENGINES, &c.**—Description of Engines 2 Compound steam engines Revs. per minute 150  
 Dia. of Cylinders 270 x 510 mm Length of Stroke 360 mm No. of Cylinders 2 x 2 No. of Cranks 2 x 2  
 Crank shaft, dia. of journals as per Rule 115 mm as fitted 115 mm Crank pin dia. 120 mm Crank webs Mid. length breadth 130 mm Thickness parallel to axis ✓  
 as fitted 115 mm Crank webs Mid. length thickness 80 mm Thickness around eye-hole ✓  
 Intermediate Shafts, diameter as per Rule 110 mm as fitted 110 mm Thrust shaft, diameter at collars as per Rule 115 mm as fitted 115 mm  
 Tube Shafts, diameter as per Rule ✓ as fitted ✓ Screw Shaft, diameter as per Rule 130 mm as fitted 130 mm Is the tube screw shaft fitted with a continuous liner no  
 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 580 mm  
 Propeller, dia. 1840 mm Pitch 2220 mm No. of Blades 4 Material C. Steel whether Moveable solid Total Developed Surface 15.5 sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 45 mm Stroke 100 mm Can one be overhauled while the other is at work Yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 45 mm Stroke 100 mm Can one be overhauled while the other is at work Yes  
 Feed Pumps No. and size 2 7" x 5" x 12" How driven steam Pumps connected to the Main Bilge Line No. and size 2 6" x 4" x 6" How driven steam  
 Ballast Pumps, No. and size 2 240 x 216 x 300 mm Lubricating Oil Pumps, including Spare Pump, No. and size ✓  
 Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 3 à 2"  
 In Pump Room ✓ In Holds, &c. each compartment 1 à 2"  
WT compartment tween screwshaft 1 à 2"  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 à 2 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 à 2 1/2" 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 both  
 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 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 none Is it fitted with a watertight door ✓ worked from ✓  
But special arrangements fitted

**MAIN BOILERS, &c.**—(Letter for record no) Total Heating Surface of Boilers 140 m<sup>2</sup> 15067  
 Is Forced Draft fitted no No. and Description of Boilers Single ended Multitubular Working Pressure 12 kg  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes  
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? 170 lb.  
 Is the donkey boiler intended to be used for domestic purposes only ✓  
**PLANS.** Are approved plans forwarded herewith for Shafting 9-11-36 Main Boilers 6-10-36 Auxiliary Boilers ✓ Donkey Boilers ✓  
 Superheaters ✓ General Pumping Arrangements 21-11-36 Oil fuel Burning Piping Arrangements ✓

### SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes  
 State the principal additional spare gear supplied two screwshafts, one set of coupling bolts, top and bottom end bolts, nuts, piston strings, valves for air and bilge and feed pumps etc.

The foregoing is a correct description,

Manufacturer.



Rpt. 5  
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Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - - -  
 Total No. of visits 9

Dates of Examination of principal parts—Cylinders 4-11-36 Slides 4-11-36 Covers 4-11-36  
 Pistons 4-11-36 Piston Rods 4-11-36 Connecting rods 4-11-36  
 Crank shaft 4-11-36 Thrust shaft 4-11-36 Intermediate shafts 4-11-36  
 Tube shaft ✓ Screw shaft 18-2-37 Propeller 18-2-37  
 Stern tube 18-2-37 Engine and boiler seatings 5-3-37 Engines holding down bolts 2-3-37  
 Completion of fitting sea connections 5-3-37  
 Completion of pumping arrangements 23-3-37 Boilers fixed 10-3-37 Engines tried under steam 23-3-37  
 Main boiler safety valves adjusted 10-3-37 Thickness of adjusting washers Port 15<sup>m</sup>. Starb 18<sup>m</sup>.  
 Crank shaft material SM steel Identification Mark BV Thrust shaft material SM steel Identification Mark BV  
 Intermediate shafts, material S. Identification Marks BV Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material SM steel Identification Mark 480-43 <sup>Boiler No</sup> KA-17-12-36 Steam Pipes, material Steel Test pressure 26<sup>1/2</sup>psi Date of Test 5-3-37  
 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 ✓ 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 no If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery has been opened up, examined and dimensions verified with the approved plans. The whole has been fitted on board in accordance with Secretary's letters and Society's Rules. Machinery tried under full working condition and found all in good order and in my opinion eligible to be recorded in the Society's Register book with Lmc. 3-37.

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 ...	£	200.00		10.4.1937
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any)	£	13.00		4.5.37

C.H. Bourne  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 16 APR 1937  
Lmc 3.37  
 Assigned \_\_\_\_\_

