

REPORT ON MACHINERY.

No. 10461

Received at London Office MON. 17 SEP 1917

Date of writing Report September 19 1917 When handed in at Local Office 19 Port of Rotterdam
 No. in Survey held at Rotterdam Date, First Survey January 24 Last Survey Aug 21 19 17
 Reg. Book. on the Steel Screw Steamer "Johanna" (Number of Voids 16)
 Master A. P. Rins Built at H. Lambrecht By whom built Junkers, Ham. Tons { Gross 1046.26
 Engines made at Rotterdam By whom made Wilton Engineering, England when made 1917
 Boilers made at Rotterdam By whom made W. when made 1917
 Registered Horse Power 1 Owners A. V. Muel, H. M. M. J. "Johanna" Port belonging to Rotterdam
 Nom. Horse Power as per Section 28 206 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

GINES, &c.—Description of Engines Vertical triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 14" x 22" x 51" Length of Stroke 56" Revs. per minute 80 Dia. of Screw shaft 10 1/2" as per rule 10 1/2" Material of Steel
 the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight
 the propeller boss Yes If the liner is in more than one length are the joints burned in 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 lightly fitted If two
 liners are fitted, is the shaft lapped or protected between the liners No Length of stern bush 8'-9"
 Dia. of Tunnel shaft 10 1/2" as per rule 10 1/2" Dia. of Crank shaft journals 10 1/2" as per rule 10 1/2" Dia. of Crank pin 10 1/2" Size of Crank webs 8 1/2" x 4 1/2" Dia. of thrust shaft under
 flars 10 1/2" Dia. of screw 13 1/2" Pitch of Screw 13 1/2" No. of Blades 4 State whether moveable No Total surface 644
 No. of Feed pumps 2 Diameter of ditto 3 1/2" Stroke 18" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 18" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps 4 1/2" x 5" x 6", 8 1/2" x 10" x 10" No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 2 suction 2 1/2" In Holds, &c. one hold 2 of 1 1/2", one hold 2 of 1 1/2"
 No. of Bilge Injections one sizes 5" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 6"-1 1/2"
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they 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 Discharge Pipes 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
 That pipes are carried through the bunkers short length by pipes in hold How are they protected boxed in
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door No worked from No

BOILERS, &c.—(Letter for record Yes) Manufacturers of Steel Krupp, Remscheid, Germany
 Total Heating Surface of Boilers 3410 sq. ft. Is Forced Draft fitted Yes No. and Description of Boilers 2 Horizontal marine boilers
 Working Pressure 180 lbs. Tested by hydraulic pressure to 240 lbs. Date of test 2.2.17 No. of Certificate 628
 Can each boiler be worked separately Yes Area of fire grate in each boiler 50 sq. ft. No. and Description of Safety Valves to
 each boiler Two spring loaded Area of each valve 11 sq. in. Pressure to which they are adjusted 180 lbs. Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork over 16" Mean dia. of boilers 15 1/2" Length 10'-4 1/2" Material of shell plates Steel
 Thickness 1 1/2" Range of tensile strength 28-32 tons Are the shell plates welded or flanged Yes Descrip. of riveting: cir. seams alt. lap
 straight seams alt. butt Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 18 1/2"
 Percentage of strength of longitudinal joint 85% Working pressure of shell by rules 195 lbs. Size of manhole in shell 12" x 16"
 No. of compensating ring 8" x 1 1/2" No. and Description of Furnaces in each boiler 3-Murdoch Material Steel Outside diameter 5'-9 1/2"
 Length of plain part top 6" bottom 6" Thickness of plates crown 1 1/2" bottom 1 1/2" Description of longitudinal joint Welded No. of strengthening rings 2
 Working pressure of furnace by the rules 180 lbs. Combustion chamber plates: Material Steel Thickness: Sides 1 1/4" Back 1 1/4" Top 1 1/4" Bottom 1 1/4"
 Pitch of stays to ditto: Sides 8" x 7 1/4" Back 8" x 7 1/4" Top 8" x 8" If stays are fitted with nuts or riveted heads Yes Working pressure by rules 195 lbs.
 Material of stays Steel Area at smallest part 1.48 sq. in. Area supported by each stay 6.2 sq. in. Working pressure by rules 195 lbs. End plates in steam space:
 Material Steel Thickness 1 1/2" Pitch of stays 1 1/2" x 15" How are stays secured by nuts and washers Working pressure by rules 200 lbs. Material of stays Steel
 Area at smallest part 5.94 sq. in. Area supported by each stay 3.15 sq. in. Working pressure by rules 195 lbs. Material of Front plates at bottom Steel
 Thickness 1 1/2" Material of Lower back plate Steel Thickness 1 1/2" Greatest pitch of stays 15 1/2" Working pressure of plate by rules 180 lbs.
 Diameter of tubes 5 1/4" Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates Steel Thickness: Front 1 1/4" Back 1 1/4" Mean pitch of stays 8 1/4"
 Pitch across wide water spaces 14 1/2" Working pressures by rules 155 lbs. Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 8 1/2" x 1 1/2" Length as per rule 30 1/2" Distance apart 8" Number and pitch of stays in each 3-8"
 Working pressure by rules 195 lbs. Steam dome: description of joint to shell No % of strength of joint No
 Diameter No Thickness of shell plates No Material No Description of longitudinal joint No Diam. of rivet holes No
 Pitch of rivets No Working pressure of shell by rules No Crown plates No Thickness No How stayed No

SUPERHEATER. Type Water Date of Approval of Plan No Tested by Hydraulic Pressure to No
 Date of Test No Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler No
 Material of Safety Valve No Pressure to which each is adjusted No Is Easing Gear fitted No

SPARE GEAR. State the articles supplied :—

Naamloze Vennootschap

WILTON'S Machinefabriek en Scheepswerf

The foregoing is a correct description.

M. Milton.

Manufacturer.

| | | |
|--------------------------------|---------------------------------------|--|
| Dates of Survey while building | During progress of work in shops - - | <i>Jan'y Feb'y April 10. 19 May 2. 19 20 July 18. 20 Dec. 19 Jan'y 4. 20 Oct. 11. 20 Nov. 14. 19 20 21 Dec. 6. 20 12. 12. 13. 14. 18. 20</i> |
| | During erection on board vessel - - - | <i>Jan. 5. 8. 12. 14. 25. 26. 31. Feb'y 5. 9. 14 May 15 June 11. 18. 26 July 24. 9. 12. 19. Aug. 12</i> |
| | Total No. of visits | <i>45.</i> |

Is the approved plan of main boiler forwarded to the *Dept.* ☒

Is the approved plan of main boiler forwarded herewith *yes*

Dates of Examination of principal parts—Cylinders $\frac{12}{10}$ - $\frac{31}{1}$ Slides $\frac{14}{11}$ - $\frac{31}{1}$ Covers $\frac{14}{11}$ - $\frac{31}{2}$ Pistons $\frac{14}{11}$ - $\frac{31}{1}$ Rods $\frac{16}{11}$ - $\frac{14}{2}$
Connecting rods $\frac{16}{11}$ - $\frac{14}{2}$ Crank shaft $\frac{24}{11}$ - $\frac{14}{2}$ Thrust shaft $\frac{6}{12}$ - $\frac{14}{2}$ Tunnel shafts \angle Screw shaft $\frac{6}{12}$ - $\frac{4}{5}$ Propeller $\frac{4}{5}$
Stern tube $\frac{4}{5}$ Steam pipes tested $\frac{19}{4}$ Engine and boiler seatings $\frac{18}{6}$ - $\frac{24}{6}$ Engines holding down bolts $\frac{24}{6}$
Completion of pumping arrangements $\frac{19}{4}$ Boilers fixed $\frac{26}{6}$ Engines tried under steam $\frac{22}{8}$
Completion of fitting sea connections $\frac{18}{4}$ Stern tube $\frac{18}{6}$ Screw shaft and propeller $\frac{18}{6}$
Main boiler safety valves adjusted $\frac{22}{8}$ Thickness of adjusting washers. Port: 4 1/2 in. No. 2: 26 7/8 in. No. 3: 24 in. No. 4: 20 in. No. 5: 18 in.
Material of Crank shaft Steel Identification Mark on No. 48 on 11 & 12 Material of Thrust shaft Steel Identification Mark on No. 62 on 11 & 12
Material of Tunnel shafts \angle Identification Marks on Do. \angle Material of Screw shafts Steel Identification Marks on No. 48 on 11 & 12
Material of Steam Pipes Steel Test pressure 400 lb

Is an installation fitted for burning oil fuel ☒ Is the flash point of the oil to be used over 150°F ☒

Have the requirements of Section 49 of the Rules been complied with ☐

Is this machinery duplicate of a previous case? If so, state name of vessel.....

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

The machinery and boiler having been fitted in accordance with the approved plans and Secretary's letter, material tested as required and workmanship good, the machinery having worked good under steam. I am of opinion that the vessel is eligible to be recorded in the Register book. + L. M. C. P. 14.

It is submitted that
this vessel is eligible for
~~THE~~ RECORD. + LMC 8.17.

| | | | | | | |
|------------------------------|-----|-------|---------|---|---------------------------------------|------------------------------------|
| The amount of Entry Fee | ... | £ | 24. - | : | } When applied for, 6/9 1947 | |
| Special | ... | £ | 363. 60 | : | | |
| Donkey Boiler Fee | ... | £ | : | : | | } When received, 7/9 1947 |
| Travelling Expenses (if any) | £ | 16. - | : | : | | |

Committee's Minute FRI-SEP. 21 1917.

Assigned

Certificate (if required) to be sent to Surgeons, Rotterdam.
not to write on or below the space for Committee's Minute.)

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

Lloyd's Register
Foundation