

REPORT ON MACHINERY.

No. 10770

Received at London Office WED. AUG. 30. 1916

of writing Report 21 August 1916 When handed in at Local Office 19 Port of Rotterdam

in Survey held at Flushing Date, First Survey May 14 1916 Last Survey Aug 17 1916

g. Book. on the Dutch Steel Ship Steamer "Stintland" (Number of Visits 12) Gross 3202.46

ster Picaen Built at Althundam By whom built Messrs. Jan Smid & Co. Net 1194.45

ines made at Flushing By whom made Van der Schelde When built 1916

lers made at Flushing By whom made Van der Schelde when made 1916

gistered Horse Power L Owners Scheepvaart en Steenkolen Mij. Port belonging to Rotterdam

n. Horse Power as per Section 28 203 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

GINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3

a. of Cylinders 20" x 32" x 52" Length of Stroke 39" Revs. per minute 80 Dia. of Screw shaft 12 1/8" as per rule 12 1/8" as fitted 12 1/8" Material of Steel

the screw shaft fitted with a continuous liner the whole length of the stern tube No liner Is the after end of the liner made water tight

the propeller boss L If the liner is in more than one length are the joints burned No 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 L If two

ers are fitted, is the shaft lapped or protected between the liners L Length of stern bush 4 1/2"

a. of Tunnel shaft L as per rule L Dia. of Crank shaft journals L as per rule L Dia. of Crank pin 11 1/2" Size of Crank webs 4 1/2" x 4 1/2" Dia. of thrust shaft under

bars 11 1/2" Dia. of screw 14 1/2" Pitch of Screw 14 1/2" No. of Blades 4 State whether moveable No Total surface 62 1/2"

b. of Feed pumps 2 Diameter of ditto 2 1/4" Stroke 20 1/4" Can one be overhauled while the other is at work Yes

b. of Bilge pumps 2 Diameter of ditto 5" Stroke 20 1/4" Can one be overhauled while the other is at work Yes

b. of Donkey Engines 2 Sizes of Pumps 10" x 12" x 10" No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room 2 m. Starb. and 2 m. Centre of In Holds, &c. 2 1/2" m. hold and 2 1/2" m. hold of 5"

b. of Bilge Injections L sizes 5 1/2" Connected to circulating pump Is a separate Donkey Suction fitted in Engine room & size 1 1/2" of 5"

re 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

re all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both

re they fired 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

re 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 No How are they protected L

re all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

re the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

the Screw Shaft Tunnel watertight No tunnel Is it fitted with a watertight door L worked from L

BOILERS, &c.—(Letter for record L) Manufacturers of Steel Messrs. Phoenix M. Works Union of Houde.

total Heating Surface of Boilers 3450 Is Forced Draft fitted No No. and Description of Boilers 2 Horizontal main boilers

orking Pressure 180 lb. Tested by hydraulic pressure to 360 lb. Date of test 5.1.16 No. of Certificate 602

an each boiler be worked separately Yes Area of fire grate in each boiler 50.45 No. and Description of Safety Valves to

ch boiler 2 Spring loaded Area of each valve 2.06 Pressure to which they are adjusted 180 lb. 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 1/2" Material of shell plates Steel

Thickness 1 1/2" Range of tensile strength 18-22 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams By all means

ng. seams all butt Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 4 1/2" Lap of plates or width of butt straps 18 1/2"

as per centages of strength of longitudinal joint rivets 89 1/2% Working pressure of shell by rules 192 lb. Size of manhole in shell 12" x 16"

Size of compensating ring 1/2" diameter No. and Description of Furnaces in each boiler 3 Morison Material Steel Outside diameter 3' 8 1/2"

Length of plain part top Thickness of plates crown Description of longitudinal joint Welded No. of strengthening rings 9 m.

Working pressure of furnace by the rules 198 lb. Combustion chamber plates: Material Steel Thickness: Sides 1 1/4" Back 1 1/4" Top 1 1/4" Bottom 1 1/2"

Pitch of stays to ditto: Sides 4 1/2" x 4 1/2" Back 4 1/2" x 4 1/2" Top 4 1/2" x 4 1/2" If stays are fitted with nuts or riveted heads Welded Working pressure by rules 240 lb.

Material of stays Steel Area at smallest part 1.44 Area supported by each stay 58" Working pressure by rules 195 lb. End plates in steam space:

Material Steel Thickness 1 x 1/4" Pitch of stays 18 x 1 1/2" How are stays secured Welded Working pressure by rules 194 lb. Material of stays Steel

Area at smallest part 5.94 Area supported by each stay 315 Working pressure by rules 190 lb. Material of Front plates at bottom Steel

Thickness 1 1/4" Material of Lower back plate Steel Thickness 1 1/4" Greatest pitch of stays 12 1/2" x 8 1/2" Working pressure of plate by rules 192 lb.

Diameter of tubes 5 1/4" Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 1" Back 1 1/4" Mean pitch of stays 8 1/4" x 8 1/4"

Pitch across wide water spaces 13 1/4" Working pressures by rules 189 lb. Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 8 x 2 x 1/2" Length as per rule 2' 6" Distance apart 4 1/2" Number and pitch of stays in each 3 x 4 1/2"

Working pressure by rules 190 lb. Steam dome: description of joint to shell L % of strength of joint L

Diameter L Thickness of shell plates L Material L Description of longitudinal joint L Diam. of rivet holes L

Pitch of rivets L Working pressure of shell by rules L Crown plates L Thickness L How stayed L

SUPERHEATER. Type L Date of Approval of Plan L Tested by Hydraulic Pressure to L

Date of Test L Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler L

Diameter of Safety Valve L Pressure to which each is adjusted L Is Easing Gear fitted L

If so, is a report now forwarded? C

2 top end bolts, nuts; 2 bottom end bolts, nuts; 2 main bearing bolts, nuts; 1 set of coupling bolts; 1 set of bilge feed pump valves; 1 set of piston springs; a quantity of assorted bolts, nuts; 1 pair of iron; 12 condenser tubes; 25 ferrules; 1/2 set of fire bars. 1 set of air pump valves; 1 propeller shaft; 1 junk ring, bolts, nuts. 1 feed pump ram; 12 plain 1/2 inch tubes; 1 air and circulation pump valve; 1 eccentric shaft, bolts complete. 1 check valve; 1 propeller. ✓

KONINKLYKE MAATSCHAPPY "DE SCHELDE"

Jos. van Raalte

Manufacturer.

Dates of Survey while building	During progress of work in shops --	May 14. 24. June 13. 29. Aug. 16. 30. Sept. 21. Oct. 5. 15. Nov. 11. 29. Dec. 21. Jan. 5. Feb. 21
	During erection on board vessel --	March 15. April 15. June 24. July 13. 17. 24. Aug. 7. 17.
	Total No. of visits.	22.
	Is the approved plan of main boiler forwarded herewith. <input checked="" type="checkbox"/>	

Is the approved plan of main boiler forwarded herewith *Yes* ✓
also shaft and pump in place
 " " " donkey " " "

Dates of Examination of principal parts—Cylinders $\frac{14}{5}$ - $\frac{29}{6}$ Slides $\frac{29}{6}$ - $\frac{11}{11}$ Covers $\frac{14}{5}$ - $\frac{29}{6}$ Pistons $\frac{29}{6}$ - $\frac{11}{11}$ Rods $\frac{14}{5}$ - $\frac{11}{11}$
Connecting rods $\frac{14}{5}$ - $\frac{11}{11}$ Crank shaft ~~made~~ Thrust shaft $\frac{11}{11}$ Tunnel shafts ~~gunmetal~~ Screw shaft $\frac{21}{2}$ Propellers $\frac{16}{8}$
Stern tube $\frac{21}{2}$ - $\frac{26}{6}$ Steam pipes tested $\frac{4}{8}$ Engine and boiler seatings $\frac{29}{6}$ Engines holding down bolts $\frac{4}{8}$
Completion of pumping arrangements $\frac{19}{4}$ - $\frac{7}{8}$ Boilers fixed $\frac{26}{6}$ Engines tried under steam $\frac{17}{8}$
Completion of fitting sea connections $\frac{26}{6}$ Stern tube $\frac{4}{8}$ Screw shaft and propeller $\frac{4}{8}$
Main boiler safety valves adjusted $\frac{14}{8}$ Thickness of adjusting washers $P. 2. 5 \frac{1}{2} \text{ in. } 1. 5 \text{ in. } 1. 5 \text{ in. } 2. 5 \text{ in. } 1. 5 \text{ in. } 1. 5 \text{ in. } 1. 5 \text{ in. } 1. 5 \text{ in.}$
Material of Crank shaft ~~Steel~~ Identification Mark on ~~Do.~~ $\frac{4}{8}$ Material of Thrust shaft ~~Steel~~ Identification Mark on ~~Do.~~ $\frac{14}{8}$
Material of Tunnel shafts $\frac{1}{2}$ Identification Marks on ~~Do.~~ Material of Screw shafts ~~Steel~~ Identification Marks on ~~Do.~~ $\frac{14}{8}$
Material of Steam Pipes ~~Steel~~ ✓ Test pressure $\frac{14}{8}$

Is an installation fitted for burning oil fuel no. ✓

Is the flash point of the oil to be used over 150°F. c

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

Is this machinery duplicate of a previous case. *Yes* If so, state name of vessel *S. S. "Dickensland" Ant. Reg. 9448*

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, matured tests as required, workmanship good and the machinery having worked good under steam. I am of opinion that the vessel is eligible to be recorded in the Registry Book. with t. L. M. C. S. 16.

The coin pump has not yet been fitted, this will be done upon the first convenient opportunity, all connections for same are made; the C. B. O. T. did not allow the pump to pass in the existing circumstances.

It is submitted that
this vessel is eligible for
THE BROOD + LMC 8.16

The amount of Entry Fee	...	£	15	:	When applied for,
Special	...	£	361.80	:	22/10 1916
Donkey Boiler Fee	...	£	:	:	When received,
Travelling Expenses (if any)	£	71	:	:	26/10 1916

Committee's Minute

FRI. SEP. 1-1916

Assigned

+ l. mc 8.16

P. ex Bernochi
Engineer Surveyor to Lloyd's Register of Shipping.