

No. 20027

Received at London Office... THE DEC. 47 1920

A. Viviani Built at Chepstow By whom built Monmouth S. B. Co. Ltd When built 1920
 made at Manchester By whom made Metropolitan-Vickers E. C. Ltd when made 1919
 " Huddersfield " Spring & Barton & Co. Ltd " 1919
 made at Renfrew By whom made Palcock & Colclough when made 1918
 red Horse Power 100 Owners Nav. Gen. Stab. (Gen. Rina Florio Rube) Port belonging to Genoa
Amo e Lloyd Sestione
 Horse Power at Full Power 2900 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

NE ENGINES, &c.—Description of Engines *Kateau Turbines 1 & 2 R. Gear* No. of Turbines *2 (H.P. & L.P.)*
of Rotor Shaft Journals, H.P. *4 1/2"* L.P. *4 1/2"* Diameter of Pinion Shaft *1st 4 1/2", 2nd 9"*
of Journals *1st 4 1/2", 2nd 9"* Distance between Centres of Bearings *1st 27", 2nd 46 1/2"* Diameter of Pitch Circle *1st 6.302" 2nd 13.379"*
of Wheel Shaft *1st 9", 2nd 14 1/4"* Distance between Centres of Bearings *1st 26", 2nd 45 1/2"* Diameter of Pitch Circle of Wheel *1st 49.656", 2nd 76 1/2"*
Face *1st 15", 2nd 33 1/2"* Diameter of Thrust Shaft under Collars *15"* Diameter of Tunnel Shaft *as per rule.*
Shafts *One* Diameter of same *as per rule.* *as fitted. 13 1/4" ✓* Diameter of Propeller *17'-9"* Pitch of Propeller *16'-6"*
4 State whether Moveable *No* Total Surface *100 ft²* Diameter of Rotor Drum, H.P. *✓* L.P. *✓* Astern *✓*
Bottom of Groove, H.P. *✓* L.P. *✓* Astern *✓* Revs. per Minute at Full Power, Turbine *3,500* Propeller *80.*

H. P.			L. P.			ASTERN.		
HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
7/8" & 1 1/8"	3'-2 1/2" & 3'-3 1/4"	2	1 5/8"	3'-3 1/8"	1	H. P.		
1 1/16"	3'-2 3/16"	1	1 7/8"	3'-3 7/8"	1	1 1/16" & 2 1/4"	3'-2 1/4" & 3'-3 1/2"	2
1"	3'-3"	1	2 1/2"	3'-4 1/2"	1			
1 1/16"	3'-2 15/16"	1	3 1/16"	3'-5 1/16"	1	L. P.		
1 1/8"	3'-3 1/8"	1	4 3/4"	3'-6 3/4"	1	2 1/16"	3'-4 1/16"	1
			6 1/8"	3'-8 1/8"	1	4"	3'-6"	1
			7"	3'-9"	1			

of Feed pumps 2. 11 1/2" Steam, 8" Water & 24" Stroke ✓
of Bilge pumps One Bilge & Ballast 10 1/2" Steam, 14" Water & 24" Stroke, 1 Gen. Service 7" x 8" x 24" Stroke ✓
of Bilge suction in Engine Room Four 3 1/2", 1 independent 8" ✓
In Holds, &c. N°1 hold 1, 3 1/2" N°2, 2, 3 1/2" River Bunker 2-2 1/2" ✓
enter Deep Tank 1-3 1/2", N°3 Hold 3, 3 1/2", N°4 Hold 1-3 1/2" & 2, 2 1/2" Tunnel 2, 2 1/2", 1, 3" Drivell. ✓
injections One sizes 1 1/4" Connected to condenser, or to circulating pump One separate Donkey Suction fitted in Engine Room & size 4" & 8" ✓
large suction pipes fitted with roses ysis. ✓ Are the roses in Engine room always accessible ysis. ✓
connections with the sea direct on the skin of the ship No ✓ Are they Valves or Cocks Both. ✓
sufficiently high on the ship's side to be seen without lifting the stokehold plates ysis. ✓ Are the Discharge Pipes above or below the deep water line Below. ✓
fitted with a Discharge Valve always accessible on the plating of the vessel ysis. ✓ Are the Blow Off Cocks fitted with a spigot and brass covering plate ysis. ✓
are carried through the bunkers Bilge & Fore Peak Cautious ✓ How are they protected steel covers ✓
Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times ysis. ✓
Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges ysis. ✓
Shaft Tunnel watertight ysis. ✓ Is it fitted with a watertight door ysis. ✓ worked from E. R. grating at level of upper deck.

S, &c.—(Letter for record 3.) Manufacturers of Steel Castles & Sons Ltd 6- Scotland, Gwent & Lloyd
ing Surface of Boilers 9636 Is Forced Draft fitted yes. No. and Description of Boilers 3 Balanced & Mixture Marine
ressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 13-Oct-10. No. of Certificate 18.
r be worked separately yes. Area of fire grate in each boiler 85 1/4 sq No. and Description of Safety Valves to
spring loaded Area of each valve 3 1/2" dia. Pressure to which they are adjusted 200 lbs. Are they fitted with easing gear yes
nce between boilers or uptakes and bunkers or woodwork 6'-0" Mean dia. of boilers 4'-0" Length 15'-1 1/4" Material of shell plates S.
16" x 1 1/2" Range of tensile strength 28/32 Are the shell plates welded or flanged — Descrip. of riveting: cir. seams D.R.
T.R. Single B-S. Diameter of rivet holes in long. seams 29/32 Pitch of rivets 3.53 Lap of plates or width of butt straps 7 1/4"
rivets 76.7 Working pressure of shell by rules 238 Size of manhole in shell 15" x 11"
of strength of longitudinal joint plates 74.4
nsating ring 7 1/2" x 2'-4 3/4" x 1'-10 1/2" No. and Description of Furnaces in each Boiler ✓ Material ✓ Outside diameter ✓
in part top ✓ Thickness of plates crown ✓ Description of longitudinal joint ✓ No. of strengthening rings ✓
bottom ✓ bottom ✓
ssure of furnace by the rules ✓ Combustion chamber plates: Material ✓ Thickness: Sides ✓ Back ✓ Top ✓ Bottom ✓
s to ditto: Sides ✓ Back ✓ Top ✓ If stays are fitted with nuts or riveted heads ✓ Working pressure by rules ✓
stays ✓ Diameter at smallest part ✓ Area supported by each stay ✓ Working pressure by rules ✓ End plates in steam space ✓
Thickness 13/16" Pitch of stays ✓ How are stays secured Radius Working pressure by rules 240 Material of stays ✓
smallest part ✓ Area supported by each stay ✓ Working pressure by rules ✓ Material of Front plates at bottom ✓
Material of back ✓ Thickness 17/32" Greatest pitch of stays ✓ Working pressure of plate by rules ✓
tubes 1 1/2" x 1 1/2" Pitch of tubes 2 1/4" & 2 1/2" Material of tube plates S. Thickness: Front 1 1/2" Back ✓ Mean pitch of stays ✓
wide water spaces ✓ Working pressures by rules ✓ Girders to Chamber tops: Material ✓ 2020 Dept and
rider at centre ✓ Length as per rule ✓ Distance apart ✓ Number and pitch of stays in each ✓
ssure by rules ✓ Steam dome: description of joint to shell ✓ % of strength of joint ✓ Diameter ✓
shell plates 3/4" Material S. Description of longitudinal joint weld Diameter of rivet holes ✓ Pitch of rivets ✓
ssure of shell by rules ✓ Crown plates: Thickness ✓ How stayed ✓

SUPERHEATER.

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

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

Diameter of Safety Valve

Pressure to which each is adjusted

Is Lasing Gear fitted

IS A DONKEY BOILER FITTED? *Yes (Bochran)* If so, is a report now forwarded? *No*

SPARE GEAR.

State the articles supplied:—

*Two bearing blades for Turbine Spindle
diaphragm packing rings, Gland casing for Spindles, one
shaft bearing, assorted bolts & nuts, assorted spanners
wear down jugs for Turbines, 2 Bearing bushes for slow
wheel shaft, 2 Bearing bushes for slow speed Pinion &
2 Bearing bushes for high speed wheel shaft, 2 Bearing bushes for high speed
white metallizing pistons for bearings, wear down jugs, overhauling jugs
per specification.*

The foregoing is a correct description,

Manufacturer.

Dates
of Survey
while
building

During progress of
work in shops --
During erection on
board vessel ---
Total No. of visits

April 14th, Sept. 29th, Oct. 13th, 15th, 26th Nov. 3rd

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Casings

July 1918 Rotors October 1918 Blading Nov. 1918 Gearing

Rotor shaft

Oct. 1919

Thrust shaft

19/9/19

Tunnel shafts

24/2/19

Screw shaft

28/7/19

Propeller

Stern tube

29/9/20

Steam pipes tested

15/10/20

Engine and boiler seatings

13/10/20

Engines holding down bolts

Completion of pumping arrangements

26/10/20

Boilers fixed

13/10/20

Engines tried under steam

26/10

Main boiler safety valves adjusted

26/10/20

Thickness of adjusting washers

P.B. PV $\frac{5}{16}$ " 3V $\frac{9}{32}$ ", Cen. B. PV $\frac{11}{32}$ " 3V $\frac{1}{8}$ "

Material and tensile strength of Rotor shaft

Forged mild steel U 470 = 33.2 Tons U 469 = 31.3 T Identification Mark on Do. 4470

Material and tensile strength of Pinion shaft

Nickel Chrome steel 1" 48.56 Tons Identification Mark on Do. N

Material of Wheel shaft

Mild steel Identification Mark on Do. N° 107. A

Material of Thrust shaft

Mild steel Identification Mark on Do. the

Material of Tunnel shafts

Steel Identification Marks on Do. 6403 WGH 24/2/19

Material of Screw shafts

Steel Identification Marks on Do. the

Material of Steam Pipes

Solid drawn steel

Test pressure

600 lbs.

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 Section 49 of the Rules been complied with

✓

Is this machinery a duplicate of a previous case

Yes

If so, state name of vessel

N-1. Standard

General Remarks

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

The Boilers (see Glasgow Rept. N° 4449) of this vessel have been fitted & secured on board & tried under full working conditions with satisfactory results & are now eligible in our opinion for record of + L.M.C 11.20, subject to the water tube boilers being surveyed annually.

Two Bochranie Dandy Boilers have been placed on board by Owners. These Boilers were not built under Lloyd's classification.

The amount of Entry Fee

£

Installation & Special

Wicks

Donkey Boiler Fee

£

Travelling Expenses (if any)

£

When applied for,

When received,

22.1.21

TUE. MAR. 22 1921

Committee's Minute

Assigned

+ L.M.C 11.20 70 C.L.

Subject

Water tube boilers

FRI. OCT. 14 1921

TUE. NOV. 18 1921

Lloyd's Register Foundation