

REPORT ON MACHINERY

No. 39553

JAN 28 1920

Date of writing Report

10

When handed in at Local Office

26-1-1920 Port of Glasgow

No. in Survey held at

Glasgow

Date, First Survey 20/6/19

Last Survey

Jan 20 1920

Reg. Book.

on the

s/s Braucas (BRANCAS)

(Number of Visits 75)

Gross

Tons

Net

Master

Built at Fremantle

By whom built Naugumilli Dockyard Ltd. No. 1

When built 1919

Engines made at

Glasgow

By whom made

Ross & Duncan

Engs No 1028

when made

1919

Boilers made at

Glasgow

By whom made

Ross & Duncan

Boilers No 1534/5

when made

1919

Registered Horse Power

Owners

Messrs Chargeurs de l'Ouest

Port belonging to

Nantes

Nom. Horse Power as per Section 28

192

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

18" x 29" x 48"

Length of Stroke

33

Revs. per minute

102

Dia. of Screw shaft

as per rule 10.2

Material of

Iron

Is 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

in the propeller boss

Yes

If the liner is in more than one length are the joints burned

Yes

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

Length of stern bush

41"

Dia. of Tunnel shaft

as per rule 8.95

as fitted 9.18

Dia. of Crank shaft journals

as per rule 9.3

as fitted 9.58

Dia. of Crank pin

9.34

Size of Crank webs

18" x 6.4"

Dia. of thrust shaft under

collars

9.2

Dia. of screw

12.9"

Pitch of Screw

11.6"

No. of Blades

4

State whether moveable

No

Total surface

51 ft

No. of Feed pumps

2

Diameter of ditto

3"

Stroke

16.2"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

3.2"

Stroke

16.2"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

2

Sizes of Pumps

6-4 1/2 x 6 FEED DONKEY
7-8 x 8 BALLAST

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

2-2 1/4"

In Holds, &c.

Fore hold 2-2 1/4" after hold 2-2 1/4" after

No. of Bilge Injections

1

size

4"

Connected to condenser, or to circulating pump

CP

Is a separate Donkey Suction fitted in Engine room & size

Yes 1-2 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

None

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

What pipes are carried through the bunkers

Bilge Suction

How are they protected

Wood casing

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

Dates of examination of completion of fitting of Sea Connections

21-10-19

of Stern Tube

3-11-19

Screw shaft and Propeller

3-11-19

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Upper deck

BOILERS, &c.—(Letter for record S)

Manufacturers of Steel

D. Colville & Sons

Total Heating Surface of Boilers

3622 ft

Is Forced Draft fitted

No

No. and Description of Boilers

Two Single ended multitubular

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

22-11-18

No. of Certificate

14528

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

57 1/2

No. and Description of Safety Valves to

each boiler

Two spring loaded

Area of each valve

5.9 ft

Pressure to which they are adjusted

185

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

20"

INT

Mean dia. of boilers

13'-6"

Length

10'-6"

Material of shell plates

S

Thickness

1 1/8"

Range of tensile strength

28/32 tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

L.D.R.

long. seams

T.R. All Steel

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

7 1/2"

Lap of plates or width of butt straps

16 3/8"

Per centages of strength of longitudinal joint

rivets 87.5

plate 85

Working pressure of shell by rules

183

Size of manhole in shell

16" x 12"

Size of compensating ring

7 1/4" x 1 1/8"

No. and Description of Furnaces in each boiler

Two Corrugated

Material

S

Outside diameter

43 1/4"

Length of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

weld

No. of strengthening rings

None

Working pressure of furnace by the rules

189

Combustion chamber plates: Material

S

Thickness: Sides

2 1/32"

Back

20 7/32"

Top

2 1/32"

Bottom

2 1/32"

Pitch of stays to ditto: Sides

9 1/2" x 8 1/8"

Back

8 1/4" x 8 1/8"

Top

9 1/2" x 8"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

182

Material of stays

S

Area

at smallest part

1.76

Area supported by each stay

76 ft

Working pressure by rules

185

End plates in steam space:

Material

S

Thickness

1 3/32"

Pitch of stays

18 1/2" x 16 1/2"

How are stays secured

D. nuts

Working pressure by rules

185

Material of stays

S

Area

at smallest part

5.6

Area supported by each stay

305

Working pressure by rules

191

Material of Front plates at bottom

S

Thickness

13/16"

Material of Lower back plate

S

Thickness

13/16"

Greatest pitch of stays

13 1/4" x 8 1/4"

Working pressure of plate by rules

195

Diameter of tubes

3 1/2"

Pitch of tubes

4 5/8" x 4 1/2"

Material of tube plates

S

Thickness: Front

13/16"

Back

25/32"

Mean pitch of stays

10 1/4"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

182

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

7 1/2" x 1 1/2"

Length as per rule

29 7/8

Distance apart

8"

Number and pitch of stays in each

2 @ 9 1/2"

Working pressure by rules

182

Superheater or Steam chest; how connected to boiler

Yes

Can the superheater be shut off and the boiler worked

separately

Yes

Diameter

Yes

Length

Yes

VERTICAL DONKEY BOILER—

Manufacturers of Steel

No.	Description				
Made at	By whom made		When made	Where fixed	
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate	Fire grate area	Description of Safety
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted	Date of adjustment	
If fitted with easing gear	If steam from main boilers can enter the donkey boiler		Dia. of donkey boiler	Length	
Material of shell plates	Thickness	Range of tensile strength	Descrip. of riveting long. seams		
Dia. of rivet holes	Whether punched or drilled	Pitch of rivets	Lap of plating	Per centage of strength of joint	Rivets Plates
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.	Dia. of stays	
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates	Description of joint	
Working pressure of furnace by rules	Thickness of furnace crown plates	Radius of do.	Stayed by		
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey		

SPARE GEAR. State the articles supplied:— 1 libeack of top & bottom end, main bearing & coupling bolts & nuts
1 feed suction & feed delivery valve, 1 bilge suction & 1 bilge delivery valve, 1 set of air pump valves, 1 set of
circulating pump valve, 1 main feed check valve, 1 donkey check valve, 12 junk & mg studs & nuts, 12 Condens
tubes, 6 Boiler tubes (plain), assorted bar iron, bolts & nuts

The foregoing is a correct description,

Ross & Duncan, Manufacturer.

Dates of Survey while building	During progress of work in shops --	1917. June 20 July 14 Oct 23. Dec 10. 1918 Jan 14. 23. 29. Feb 6. 7. 14. 19. 26. Mar 4. 12. 27. Apr 5. 15. 22.
	During erection on board vessel --	May 2. 10. 16. 14. 20. 28. 30. June 10. 18. 14. 21. 25. 28. July 2. 11. 8. 26. 30. Aug 1. 2. 5. 6. 9. 13. 2
	Total No. of visits	45
	Is the approved plan of main boiler forwarded herewith	no

Dates of Examination of principal parts—Cylinders	17-6-18	Slides	3-10-18	Covers	1-10-18	Pistons	21-6-18	Rods	1-10-18
Connecting rods	1-10-18	Crank shaft	14-6-18	Thrust shaft	14-6-18	Tunnel shafts	20-10-19	Screw shaft	23-10-19
Stern tube	23-10-19	Steam pipes tested	18-12-19	Engine and boiler seatings	23-10-19	Engines holding down bolts	16-12-19		
Completion of pumping arrangements	20-1-20	Boilers fixed	16-12-19	Engines tried under steam	20-1-20				
Main boiler safety valves adjusted	30-12-19	Thickness of adjusting washers	S.B. P 3/8. S 5/16. P.B. P 3/16. S. 1/4"						
Material of Crank shaft	S	Identification Mark on Do.	14-6-18. J.E.S.	Material of Thrust shaft	S	Identification Mark on Do.	14-6-18. J.E.		
Material of Tunnel shafts	S	Identification Marks on Do.	20-10-19. J.E.S.	Material of Screw shafts	Iron	Identification Marks on Do.	23-10-19. J.E.		
Material of Steam Pipes	Copper	Test pressure	360lb						

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

These Engines and Boilers have been built under Special Survey and in accordance with the Rules, the materials and workmanship are sound and good. This machinery has been fitted on board in an efficient manner, tried under working conditions and found satisfactory and is eligible in our opinion to be classed with record of L.M.C 1-20.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 1-20.

J.W.D. 2/2/20.

The amount of Entry Fee	£ 2 : 0 :	When applied for,	26.1.20.
Special	£ 28 : 16 :	When received,	28/1/20.
Donkey Boiler Fee	£ :		
Travelling Expenses (if any)	£ 3 : 15 :		

Committee's Minute GLASGOW 27 JAN 1920

Assigned + L.M.C 120.

CHINERY CERT. WRITTEN 28/1/20

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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Lloyd's Register Foundation

Rpt. 13.

Port of

No. in Reg. Book 36708.

Owners Yard No. 40.

DESCRIPTION

One 8 K open typ Capacity of Dyn

Where is Dyna

Position of Mai

Positions of

1-2 way

6 way

If fuses are fit

circuits y

If vessel is wire

Are the fuses o

Are all fuses fit

are perman

Are all switches

Total number of

A. Four or more

B. Aft & mid

C. Engine & Boi

D. Large blue

E

2 Mast he

2. Si

4

If are lights, wha

Where are the su

DESCRIPTION O

Main cable carryin

Branch cables car

Branch cables car

Leads to lamps car

Cargo light cables ca

DESCRIPTION O

1. 6 copp

vulcanised

steel arm

Joints in cables, ho

Are all the joints of

positions, none

Are there any joint

How are the cables

armout