

REPORT ON MACHINERY.

No. 2684.

TUES. 28 JAN 1908

23rd Jan 190817th Dec 1907

Fitted in this vessel whilst building.

Port of

Dublin & Glasgow

Date, first Survey

21st Nov 1907

Received at London Office

Last Survey

17th Dec 1907

No. in Survey held at

Reg. Book

on the

S.S.

Carlingford

(Number of Visits 7.)

Master

Built at

Dublin

By whom built

Dublin Dockyard Co

Gross

Net

When built

1907.

Engines made at

Glasgow

By whom made

Ross & Duncan (No 735)

when made

1907

Boilers made at

Do

By whom made

Do (No 1166)

when made

1907

Registered Horse Power

Owners J. Cockington & Co Ltd

Port belonging to

Dundalk

Horse Power as per Section 28

81

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

GINES, &c.—Description of Engines

Compound

No. of Cylinders

2

No. of Cranks

2

a. of Cylinders

18" 38"

Length of Stroke

27"

Revs. per minute

100

Dia. of Screw shaft

as per rule 8.15

Material of

Iron

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

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

are fitted, is the shaft lapped or protected between the liners

Yes

Length of stern bush

2.9"

a. of Tunnel shaft

as per rule 7.52

Dia. of Crank shaft journals

as per rule 7.89

Dia. of Crank pin

8"

Size of Crank webs

5.4" 11.3"

Dia. of thrust shaft under

bars

Bars

8"

Dia. of screw

9.6"

Pitch of Screw

12.0"

No. of Blades

4

State whether moveable

No

Total surface

35 sq

of Feed pumps

2

Diameter of ditto

3"

Stroke

13.2"

Can one be overhauled while the other is at work

Yes

of Bilge pumps

2

Diameter of ditto

3"

Stroke

13.2"

Can one be overhauled while the other is at work

Yes

of Donkey Engines

1

Sizes of Pumps

6" x 4" x 6" duplex

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

Engine Room 1-2 1/4" 1-2" 1-2 1/4" special

In Holds, &c. one 2 1/2" to F.P.T. Two 2" to hold. one 5"

hand pump to hold. one 3" hand pump to fore peak. one 2" to after peak tank.

of Bilge Injections

1

sizes

3 1/4"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

Yes - 2 1/4"

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

all connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

both

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

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

all pipes are carried through the bunkers

2 to Hold & 1 to F.P.T.

How are they protected

wood casing

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

Yes

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

Yes

of examination of completion of fitting of Sea Connections

17th Dec

of Stern Tube

9th Dec

Screw shaft and Propeller

12th Dec 1907

Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Yes

TERS, &c.—(Letter for record

8.)

Manufacturers of Steel

David Colville & Sons Ltd

Heating Surface of Boilers

1477 sq

Is Forced Draft fitted

No

No. and Description of Boilers

one single ended

Working Pressure

130 lbs

Tested by hydraulic pressure to

260 lbs

Date of test

7.11.07

No. of Certificate

9060

each boiler be worked separately

Yes

Area of fire grate in each boiler

40 sq

No. and Description of Safety Valves to

boiler

double spring loaded

Area of each valve

5.41 sq

Pressure to which they are adjusted

135 lbs

Are they fitted with easing gear

Yes

least distance between boilers or uptakes and bunkers or woodwork

5.0"

Mean dia. of boilers

12.9"

Length

10.0"

Material of shell plates

Steel

ess

13/16"

Range of tensile strength

28/32 tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

O Riv.

seams

T. R. O. B. S.

Diameter of rivet holes in long. seams

15/16"

Pitch of rivets

5 7/8"

Lap of plates or width of butt straps

1-3"

antages of strength of longitudinal joint

rivets

86

Working pressure of shell by rules

132 lbs

Size of manhole in shell

16" x 12"

compensating ring

6 3/4" x 13/16"

No. and Description of Furnaces in each boiler

2

Main

Material

Steel

Outside diameter

3.4"

of plain part

top

6.0"

Thickness of plates

crown

3.21"

Description of longitudinal joint

weld

No. of strengthening rings

one

ing pressure of furnace by the rules

132

Combustion chamber plates: Material

Steel

Thickness: Sides

9/16"

Back

7/32"

Top

9/16"

of stays to ditto

Sides

9 3/4" x 8 1/4"

Back

8" x 8"

Top

9" x 8 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

135

al of stays

Steel

Diameter at smallest part

1.24"

Area supported by each stay

64 sq

Working pressure by rules

155

End plates in steam space:

al

Steel

Thickness

29/32"

Pitch of stays

17" x 17 1/2"

How are stays secured

O. nuts

Working pressure by rules

130

Material of stays

Steel

at smallest part

3.98"

Area supported by each stay

297.5 sq

Working pressure by rules

139

Material of Front plates at bottom

Steel

ess

1/16"

Material of Lower back plate

Steel

Thickness

29/32"

Greatest pitch of stays

1/4" x 8"

Working pressure of plate by rules

137

r of tubes

3 1/4"

Pitch of tubes

4 1/2" x 4 1/4"

Material of tube plates

Steel

Thickness: Front

1/16" x 1/2"

Back

1/16"

Mean pitch of stays

10 7/8"

across wide water spaces

14 1/2"

Working pressures by rules

143 lbs

Girders to Chamber tops: Material

iron

Depth and

Distance apart

8 1/2"

Number and pitch of stays in each

2 @ 9"

of girder at centre

6 1/2" x 2"

Length as per rule

30 25/32"

Distance apart

8 1/2"

Number and pitch of stays in each

2 @ 9"

g pressure by rules

134

Superheater or Steam chest; how connected to boiler

Yes

Can the superheater be shut off and the boiler worked

Yes

Diameter

Length

Thickness of shell plates

Material

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 S		
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		Stayed by				
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey				

SPARE GEAR. State the articles supplied:— 2 connecting rod top end bolts & nuts: 2 connecting rod bottom end bolts and nuts: 2 main bearing bolts: 1 set of coupling bolts: 1 set of feed and bilge pump valves: a quantity of assorted bolts & nuts: iron of various sizes: 3 boiler tubes: 6 condenser tubes: 60 firebricks

The foregoing is a correct description,

Ross Duncan Manufacturer.

Dates of Survey while building	During progress of work in shops—	1907. July 29. Aug 5. 23. 27. Sep 4. 10. 13. 17. 20. 24. Oct 8. 17. 23. 31. Nov 1. 7
	During erection on board vessel—	19. 20. 26. Dec 2. 6. 9. 13. 17. 1908. Jan 6. 9. 14. 16. 21. 23.
	Total No. of visits	31.

Is the approved plan of main boiler forwarded herewith ☒ Yes

Dates of Examination of principal parts—	Cylinders 1. 11. 07	Slides 22. 10. 07	Covers 1. 11. 07	Pistons 11. 11. 07	Rods 22. 10.
Connecting rods 22. 10. 07	Crank shaft 4. 9. 07	Thrust shaft 11. 11. 07	Tunnel shafts	Screw shaft 20. 11. 07	Propeller 20. 11.
Stern tube 20. 11. 07	Steam pipes tested 14. 1. 08	Engine and boiler seatings Dublin	Engines holding down bolts 14. 1. 08		
Completion of pumping arrangements 16. 1. 08	Boilers fixed 14. 1. 08	Engines tried under steam 16. 1. 08			
Main boiler safety valves adjusted 16. 1. 08	Thickness of adjusting washers	Port 5/16" Star 5/16"			
Material of Crank shaft iron	Identification Mark on Do. 735	Material of Thrust shaft iron	Identification Mark on Do. 735		
Material of Tunnel shafts	Identification Marks on Do. ✓	Material of Screw shafts iron	Identification Marks on Do. 735		
Material of Steam Pipes Copper	Test pressure 400 lbs per sq"				

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

The Discharge valves, & Sea Cocks of this vessel are in my opinion well fitted & fastened. The Stern Post has been bored in place & the Tube well fitted. The stern bush, Propeller & shaft are in place, the Thrust Shaft also in place & temporarily fastened, to enable the vessel to be towed to Glasgow for Completion.

The machinery has been built under special survey: the material and workmanship being good and satisfactorily tried under steam

It is submitted that above vessel will be eligible for a record of + L.M.C. 1.08 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 1.08.

The amount of Entry Fee..	£ 1.0.0	When applied for,
Special	£ 12.3.0	28/1/08
Donkey Boiler Fee	£ :	When received,
Travelling Expenses (if any) £	:	28/1/08

Committee's Minute Glasgow 27 JAN 1908

Assigned Transmit to London

Macmillan A. J. Roma
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

FRI. 7 FEB 1908

Lloyd's Register Foundation

MACHINERY CERTIFICATE WRITTEN

Certificate (if required) to be sent to Glasgow

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