

REPORT ON MACHINERY

No. 910

Received at London Office

14th OCT. 1915

Date of writing Report

10

When handed in at Local Office

11.10.15

Port of

Middlesbrough

No. in Survey held at
Reg. Book.

Stockton-on-Tees

Date, First Survey

March 3

Last Survey

Oct. 6 1915

on the

Steel Screw Steamer

MAPLEWOOD

(S.S.N. 503)

Tons

Gross

Net

Master

Built at

Stockton

By whom built

Messrs Ropner & Sons

When built

1915

Engines made at

Stockton

By whom made

Messrs Blair & Co Ltd (N. 1828)

when made

1915

Boilers made at

Stockton

By whom made

Messrs Blair & Co Lim.

when made

1915

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

278

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

ENGINES, &c.—Description of Engines

Tri-compound

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

23½"-39"-64"

Length of Stroke

42

Revs. per minute

60

Dia. of Screw shaft

as per rule 13.47

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 in one

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

tight fit

If two

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

yes

Length of stern bush

5'-1"

Dia. of Tunnel shaft

as per rule 11.67

as fitted 12½"

Dia. of Crank shaft journals

as per rule 12.23

as fitted 12¾"

Dia. of Crank pin

13½"

Size of Crank webs

23½" x 8½"

Dia. of thrust shaft under

collars

13½"

Dia. of screw

17'-0"

Pitch of Screw

16'-6"

No. of Blades

4

State whether moveable

no

Total surface

82 sq

No. of Feed pumps

2

Diameter of ditto

3"

Stroke

30"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

4½"

Stroke

30"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps

Ballant

Judd

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

In Engine Room 3 @ 3" + one @ 3½" under boilers

In Holds, &c.

2 @ 3" in each hold

Funnel

No. of Bilge Injections

1

size

6½"

Connected to condenser, or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

yes - 4"

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

What pipes are carried through the bunkers

suctions to forward holds

How are they protected

wood ceiling

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

29.7.15

of Stern Tube

4.8.15

Screw shaft and Propeller

16.9.15

Is the Screw Shaft Tunnel watertight

see hull Rpt

Is it fitted with a watertight door

yes

worked from

top platform

BOILERS, &c.—(Letter for record (S))

Manufacturers of Steel

Messrs John Spencer & Sons

Total Heating Surface of Boilers

4142

Is Forced Draft fitted

no

No. and Description of Boilers

Two single ended

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test

15.7.15

No. of Certificate

5534

Can each boiler be worked separately

yes

Area of fire grate in each boiler

59.8 sq

No. and Description of Safety Valves to

each boiler

2 direct spring

Area of each valve

7.07

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

yes

Smallest distance between boilers or plates and bunkers on each side

2'-0"

Mean dia. of boilers

15'-3"

Length

10'-3"

Material of shell plates

steel

Thickness

1½"

Range of tensile strength

29½-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

2 Riv. lap

long. seams

2 B-3 Riv

Diameter of rivet holes in long. seams

1½"

Pitch of rivets

8½"

Lap of plates or width of butt straps

18½" x 1½"

Per centages of strength of longitudinal joint

plate

91.9

Working pressure of shell by rules

186

Size of manhole in shell

16" x 12"

Size of compensating ring

7½" x 1½"

No. and Description of Furnaces in each boiler

3 Morrison

Material

steel

Outside diameter

45½"

Length of plain part

top

bottom

Thickness of plates

9"

Description of longitudinal joint

weld

No. of strengthening rings

yes

Working pressure of furnace by the rules

192

Combustion chamber plates: Material

steel

Thickness: Sides

¾"

Back

¾"

Top

¾"

Bottom

¾"

Pitch of stays to ditto: Sides

9½" x 9½"

Back

9½" x 9"

Top

10" x 8½"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

188

Material of stays

steel

Diameter at smallest part

1.99

Area supported by each stay

85.5

Working pressure by rules

210

End plates in steam space

yes

Material

steel

Thickness

1½"

Pitch of stays

18½" x 12"

How are stays secured

nuts & washers

Working pressure by rules

199

Material of stays

steel

Diameter at smallest part

7.24

Area supported by each stay

380

Working pressure by rules

198

Material of Front plates at bottom

steel

Thickness

1½"

Material of Lower back plate

steel

Thickness

1½"

Greatest pitch of stays

16½" x 9"

Working pressure of plate by rules

233

Diameter of tubes

3½"

Pitch of tubes

4½" x 4½"

Material of tube plates

steel

Thickness: Front

1½"

Back

1½"

Mean pitch of stays

11½"

Pitch across wide water spaces

14½"

Working pressures by rules

192

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

7½" x 1½"

Length as per rule

26½"

Working pressure by rules

191

Superheater or Steam chest; how connected to boiler

none

Can the superheater be shut off and the boiler worked

separately

yes

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

Working pressure of end plates

IS A DONKEY BOILER FITTED? *yes*

If so, is a report now forwarded? *yes - Indb N° 9063*

SPARE GEAR. State the articles supplied: *Two each of con. rod top end and bottom end bolts and nuts; 2 main bearing bolts & nuts; one set of coupling bolts and nuts; one set of fuel and bilge pump valves; assorted bolts and nuts; iron of various sizes; one propeller; one tail end shaft; one set each of H.P. & M.P. ramscotton piston rings and minor gear.*

The foregoing is a correct description,
FOR BLAIR & CO., LIMITED.

S. H. Pitts

Manufacturer.

SECRETARY.

Dates of Survey while building { During progress of work in shops - - } *1915 Mar. 3. 25. 26. Apr. 1. 7. 9. 12. 14. 19. 21. 23. 26. 29. May 3. 5. 7. 10. 13. 18. 20. 21. 27. 31. Jun 2. 4. 7. 10. 14. 17. 21. 23.*
{ During erection on board vessel - - - } *25. 28. 30. Jul. 2. 5. 8. 9. 12. 15. 19. 23. 27. 29. 30. Aug 4. 5. 6. 9. 11. 12. Sep 15. 20. 21. 23. 28. Oct 1. 5. 6.*
Total No. of visits *59*

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

" " " donkey " " " *yes*

Dates of Examination of principal parts—Cylinders *13.5.15* Slides *18.5.15* Covers *18.5.15* Pistons *18.5.15* Rods *20.5.15*

Connecting rods *20.5.15* Crank shaft *27.5.15* Thrust shaft *23.4.15* Tunnel shafts *May 5. 20. 21. 23. 27. 31. 15* Screw shaft *12.8.15* Propeller *11.8.15*

Stern tube *30.7.15* Steam pipes tested *23.9.15* Engine and boiler seatings *4.8.15* Engines holding down bolts *21.9.15*

Completion of pumping arrangements *1.10.15* Boilers fixed *1.10.15* Engines tried under steam *1.10.15*

Main boiler safety valves adjusted *1.10.15* Thickness of adjusting washers *Port Boiler S = 3/8 B; Star Blr S = 3/8 B*

Material of Crank shaft *Ing Steel* Identification Mark on Do. *6968* Material of Thrust shaft *Ing Steel* Identification Mark on Do. *1205-N*

Material of Tunnel shafts *Ing Steel* Identification Marks on Do. *1205-N* Material of Screw shafts *iron* Identification Marks on Do. *6968*

Material of Steam Pipes *solid drawn copper (6 1/2 x 5/8 + 5 1/2 x 1/2)* Test pressure *400 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 duplicate of a previous case *no* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been*

built under special survey. The materials and workmanship are sound and good

The boilers and main steam pipes were tested by hydraulic pressure and the engines

and boilers examined under steam and all found satisfactory.

The machinery of this vessel is now in a good and safe working condition

and eligible in my opinion to have the notation of \star L.M.C - 10-15 in the

Register Book

It is submitted that
this vessel is eligible for
THE RECORD + L.M.C 10.15.

JWZ

JWZ

20/10/15

The amount of Entry Fee ... £ *2-0-0* When applied for, *13/10/15*
Special ... £ *33-18-0*
Donkey Boiler Fee ... £ *✓*
Travelling Expenses (if any) £ *✓* When received, *15/10/15*

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

Committee's Minute *FRI. 22 OCT. 1915*

Assigned *+ L.M.C 10.15*



© 2020
Lloyd's Register
Foundation