

Rpt. 4.

REPORT ON MACHINERY

Port of MIDDLESBROUGH-ON-TEES

Received at London Office

Mdb No. 5044
Sta No 23305

SAT. 15 JUN 1907

led 12 June 1907

No. in Survey held at Stockton & SunderlandDate, first Survey 3rd Jan'y 07Last Survey 31st May 1907(Number of Visits 5)

led (1)

Reg. Book.

Supplement

89

on the Steel S.S. Kossuth Ferencz.

Gross

Tons

Net

When built

when made

when made

Master

Engines made at

Boilers made at

Registered Horse Power

Nom. Horse Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

No. of Cylinders

No. of Cranks

ENGINES, &c.—Description of Engines

Direct Acting Trip expansion

No. of Cylinders

No. of Cranks

Dia. of Cylinders 26-42-68Length of Stroke 48Revs. per minute 56

Dia. of Screw shaft

as per rule 14 1/4

Material of

screw shaft

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

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

Length of stern bush 5-4

Dia. of Tunnel shaft

as per rule 12-9

Dia. of Crank shaft journals

as per rule 13-6as fitted 14

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

collars

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

No. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines

Sizes of Pumps

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

In Engine Room

In Holds, &c.

2 of 3 1/2" to each & 1 of

No. of Bilge Injections

sizes

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

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

Are they Valves or Cocks

Are the Discharge Pipes above or below the deep water line

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the Blow Off Cocks fitted with a spigot and brass covering plate

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

How are they protected

What pipes are carried through the bunkers

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

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

Dates of examination of completion of fitting of Sea Connections

of Stern Tube

Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

top platform

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

John Brown & Co. Ltd.

Total Heating Surface of Boilers

Is Forced Draft fitted

No

No. and Description of Boilers

Two Cyl. Tubular

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Length of plain part

top

Thickness of plates

crown

Description of longitudinal joint

No. of strengthening rings

bottom

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

End plates in steam space:

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of stays

Thickness

Pitch of stays

How are stays secured

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Can the superheater be shut off and the boiler worked

Working pressure by rules

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

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

Area of safety valves to superheater

End plates: Thickness

How stayed

Are they fitted with easing gear

Working pressure of end plates

Area of safety valves to superheater

End plates: Thickness

How stayed

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Working pressure of end plates

Area of safety valves to superheater

End plates: Thickness

How stayed

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

SPARE GEAR. State the articles supplied:— Top & bottom end connecting rods bolts & nuts
 Two main bearing bolts & nuts. Set of coupling bolts. Set of feed & bilge
 pump valves H & M P piston rings & P piston springs Propeller & propeller
 shaft Bolts & nuts assorted &c

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

Geo. Hettuskip _____ Manufacturer. of main engine & boiler.

ASSISTANT SECRETARY.

Dates of Survey while building { During progress of work in shops - 1907 Jan. 3. 8. 10. 19. 21. 28 Feb. 1. 4. 6. 8. 12. 15. 18. 20. 25. 28 Mar. 4. 6. 11. 25 April 3. 4. 10. 11. 16. 18
 { During erection on board vessel - May 12. 23. 24. 27. 28. 29. 30. 31
 Total No. of visits 34 (11) (12) June, 07 Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders 10-1-07 Slides 28-1-07 Covers 15-2-07 Pistons 6-3-07 Rods 6-3-07
 Connecting rods 6-3-07 Crank shaft 4-4-07 Thrust shaft 18-2-07 Tunnel shafts 4-2-07 Screw shaft 11-4-07 Propeller 25-7-07
 Stern tube 11-4-07 Steam pipes tested 27-5-07 Engine and boiler seatings 15-2-07 Engines holding down bolts 29-5-07
 Completion of pumping arrangements 31-5-07 Boilers fixed 29-5-07 Engines tried under steam 31-5-07
 Main boiler safety valves adjusted 31-5-07 Thickness of adjusting washers Stan B. 5 3/8 & 7/16 Stan B. 5 1/2 & 7/16
 Material of Crank shaft W. Iron Identification Mark on Do. 6176 Material of Thrust shaft W. Iron Identification Mark on Do. 6172
 Material of Tunnel shafts W. Iron Identification Marks on Do. 6129 Material of Screw shafts W. Iron Identification Marks on Do. 6196
 Material of Steam Pipes Copper solid drawn 6123 Test pressure 360 lb 6125 6126 6127 6128

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

The engines and boilers of this vessel have been constructed under special survey, the materials and workmanship are good and efficient and when tested under steam were found satisfactory. In our opinion the machinery is now eligible for the notation **L.M.C. 6.07** in the Register Book.

It is submitted that this vessel is eligible for THE RECORD.

L.M.C. 6.07
 Elec light

15/6/07

The amount of Entry Fee.. £ 3 : 0 : 0 When applied for.
 Special £ 29 : 12 : 0 25.12.03
 Donkey Boiler Fee £ 2 : 2 : 0 When received, 18/6/07
 Travelling Expenses (if any) £ : : : 19.6.07

Committee's Minute

Assigned

TUES. 18 JUN 1907

+ L.M.C. 6.07
 Elec light

MACHINERY CERTIFICATE
 WRITTEN.

Geo. R. Milner. R.N. Coomber
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register
 Foundation

Certificate (if required) to be sent to Underland

Is a Report also sent on the Hull of the Ship?

[1 m. 4. 7. - Copyable Ink.]