

REPORT ON MACHINERY

No. 28682

Received at London Office

WED. JUL. 28. 1915

Date of writing Report

19

When handed in at Local Office

14. 7-15 Port of Hull

No. in Survey held at

Hull.

Date, First Survey

25-11-14

Last Survey

6. 7

1915

Reg. Book.

on the steel ship "AISNE."

(C.D.H. 1082)

(Number of Visits)

29

Tons

Gross

315

Net

126

When built

1915.

Master

Built at

Selby.

By whom built

Lockhart & Sons

Engines made at

Hull.

By whom made

C. H. Holmes & Co. Ltd.

when made

1915.

Boilers made at

Hull.

By whom made

C. H. Holmes & Co. Ltd.

when made

1915.

Registered Horse Power

Owners

East Riding of Yorkshire Fishing Co.

Port belonging to

Hull.

Nom. Horse Power as per Section 28

84.

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

13" 23" 37"

Length of Stroke

26"

Revs. per minute

Dia. of Screw shaft

as per rule 7.88"

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

If two

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

Length of stern bush

3' 0"

Dia. of Tunnel shaft

as per rule 7.04"

Dia. of Crank shaft journals

as per rule 7.39"

Dia. of Crank pin

7 1/2"

Size of Crank

4 1/2 x 4 7/8"

collars

7 1/2"

Dia. of screw

9-7 1/2"

Pitch of Screw

11 ft.

No. of Blades

4

State whether moveable

no.

Total surface

314"

No. of Feed pumps

1.

Diameter of ditto

2 7/8"

Stroke

16"

Can one be overhauled while the other is at work

yes.

No. of Bilge pumps

1.

Diameter of ditto

2 7/8"

Stroke

16"

Can one be overhauled while the other is at work

yes.

No. of Donkey Engines

1.

Sizes of Pumps

6" x 3 1/2" x 6"

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

In Engine Room 2-2" One forward, one aft

In Holds, &c. 4-2" After Slushwell, Forward

No. of Bilge Injections

1

sizes 3 1/2"

Connected to condenser, or to circulating pump

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

Hold Suctions.

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 31.3.15. of Stern Tube 31.3.15. Screw shaft and Propeller 31.3.15.

Is the Screw Shaft Tunnel watertight

S.

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record

S.)

Manufacturers of Steel

Messrs. Stewart & Lloyd.

Total Heating Surface of Boilers

1350

Is Forced Draft fitted

no.

No. and Description of Boilers

One single-ended.

Working Pressure

200 lbs.

Tested by hydraulic pressure to

400 lbs.

Date of test

13.4.15.

No. of Certificate

3074.

Can each boiler be worked separately

yes.

Area of fire grate in each boiler

38 sq.

No. and Description of Safety Valves to

each boiler

2. Spring

Area of each valve

4.9 sq.

Pressure to which they are adjusted

200 lbs.

Are they fitted with easing gear

yes.

Smallest distance between boilers or uptakes and bunkers or woodwork

7"

Mean dia. of boilers

13-9 1/2"

Length

10-9"

Material of shell plates

S.

Thickness

1/4". Range of tensile strength

28 tons.

Are the shell plates welded or flanged

yes.

Descrip. of riveting: cir. seams

DR.

long. seams

JR 10 B.

Diameter of rivet holes in long. seams

1 1/32"

Pitch of rivets

8 1/16"

Lap of plates or width of butt straps

17 1/4"

Per centages of strength of longitudinal joint

rivets 85.6. plate 85.

Working pressure of shell by rules

202.

Size of manhole in shell

16" x 12"

Size of compensating ring

7" x 1 3/32"

No. and Description of Furnaces in each boiler

3 plain

Material

S.

Outside diameter

3-4"

Length of plain part

top 6-5" bottom 6-5"

Thickness of plates

crown 3/4" bottom 3/4"

Description of longitudinal joint

welded.

No. of strengthening rings

yes.

Working pressure of furnace by the rules

202.

Combustion chamber plates: Material

S.

Thickness: Sides

23" 3/32"

Back

23" 3/32"

Top

23" 3/32"

Bottom

23" 3/32"

Pitch of stays to ditto: Sides

9 x 8 5/8"

Back

8 x 10 3/8"

Top

10 1/2 x 8 5/8"

If stays are fitted with nuts or riveted heads

nuts.

Working pressure by rules

202.

Material of stays

S.

Area at smallest part

2.07 sq.

Area supported by each stay

87.3 sq.

Working pressure by rules

213.

End plates in steam space:

Material

S.

Thickness

1 5/16"

Pitch of stays

20 x 20"

How are stays secured

BNW.

Working pressure by rules

204.

Material of stays

S.

Diameter at smallest part

8.76 sq.

Area supported by each stay

400 sq.

Working pressure by rules

227 sq.

Material of Front plates at bottom

S.

Thickness

15" 7/16"

Material of Lower back plate

S.

Thickness

29" 3/32"

Greatest pitch of stays

14 x 8"

Working pressure of plate by rules

218.

Diameter of tubes

3 1/2"

Pitch of tubes

5 1/8 x 5"

Material of tube plates

S.

Thickness: Front

15" 7/16"

Back

7" 1/8"

Mean pitch of stays

10 1/4 x 10"

Pitch across wide water spaces

14"

Working pressures by rules

200.

Girders to Chamber tops: Material

S.

Depth and

thickness of girder at centre

11 1/2 x 1 3/4"

Length as per rule

38 7/8"

Distance apart

10 1/8" 15" 16"

Number and pitch of stays in each

3 at 8 5/8"

Working pressure by rules

207.

Superheater or Steam chest: how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Description of longitudinal joint

Diam. of rivet

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

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Lloyd's Register

Foundation

010766-010776-0107

IS A DONKEY BOILER FITTED?

no.

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two each top & bottom end connecting rods, two each top & bottom end connecting bolts, two main bearing bolts, one set of coupling bolts, one set each feed & bilge pump valves, iron of various sizes, a quantity of assorted bolts & nuts.

The foregoing is a correct description,

p. pro CHARLES D. HOLMES & CO. LTD.

Harold L. Shanderson

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1914: - Nov 25 Dec 30 1915: - Jan 7. 15. 20. 23. Mar 11. 17. 19. 24. 26. 31. Apr 9. 13. 19. 27 May 6. 29. Jun 3. 8. 16. 19. 23. 25. 26. 28 Jul 1. 5. 6. During erection on board vessel - - - 29. Total No. of visits 29. Is the approved plan of main boiler forwarded herewith Rph 277

Dates of Examination of principal parts—Cylinders 6. 5. 15. Slides 3. 6. 15. Covers 27. 5. 15. Pistons 3. 6. 15. Rods 8. 6. 15. Connecting rods 8. 6. 15. Crank shaft 3. 6. 15. Thrust shaft 13. 4. 15. Tunnel shafts 26. 3. 15. Propeller 26. 3. 15. Stern tube 26. 3. 15. Steam pipes tested 28. 6. 15. Engine and boiler seatings 31. 3. 15. Engines holding down bolts 19. 6. 13. Completion of pumping arrangements 1. 7. 15. Boilers fixed 19. 6. 13. Engines tried under steam 1. 7. 15. Main boiler safety valves adjusted 1. 7. 15. Thickness of adjusting washers SV 1/4 full. PV 1/4 full. Material of Crank shaft S. Identification Mark on Do. 1460. Material of Thrust shaft S. Identification Mark on Do. 706. Material of Tunnel shafts S. Identification Marks on Do. Material of Screw shafts S. Identification Marks on Do. 144. Material of Steam Pipes Copper Solid drawn. Test pressure 1400 lbs. hyd. Is an installation fitted for burning oil fuel 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 yes. If so, state name of vessel "Sh. Cyl."

General Remarks (State quality of workmanship, opinions as to class, &c.) The engines & boiler of this vessel have been constructed under special survey in accordance with the Rules. The materials and workmanship are sound and good. The Boiler tested by hydraulic pressure and with the engines secured on board & tested under steam they are now in good order and safe-working condition and respectfully submitted as being eligible in my opinion to be classed with the notation of +LMC 7.15 in the Register book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 7.15

J. G. MacKillop

Engine Surveyor to Lloyd's Register of British & Foreign Shipping

The amount of Entry Fee ... £ 1 : : When applied for, 21-7-1915 Special ... £ 12 : 12 When received, 31/7/1915 Donkey Boiler Fee ... £ : : Travelling Expenses (if any) £ 4 : 2

Committee's Minute

Assigned

+LMC 7.15

MACHINERY CERTIFICATE



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