

REPORT ON MACHINERY.

No. 16064-2
TUE NOV. 28 1922

Date of writing Report

19

When handed in at Local Office

19

Port of

WEST HARTLEPOOL

No. in Survey held at

West Hartlepool

Date, First Survey

27 Sept 1919

Last Survey

24 Nov. 1922

Reg. Book.

17093 on the S.S. "REGISTAN" (No 938)

Master

Built at

West Hartlepool

By whom built

Wm Gray & Co (1918) Ltd

Tons

Gross 4449.29

Net

114.99

When built

1922

Engines made at

West Hartlepool

By whom made

Central Marine Engine Works

when made

1922

Boilers made at

ditto

By whom made

ditto

when made

1922

Registered Horse Power

Owners

Frank Clarke Strick

Port belonging to

London

Nom. Horse Power as per Section 28

515

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

26-42-70

Length of Stroke

48

Revs. per minute

Dia. of Screw shaft

as per rule 15"

Material of

S. Stl.

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

63"

Dia. of Tunnel shaft

as per rule 13.44

Dia. of Crank shaft journals

as per rule 14.11

Dia. of Crank pin

14 1/2"

Size of Crank webs

8 3/8 x 21"

Dia. of thrust shaft under

collars

14 1/2"

Dia. of screw

18-0"

Pitch of Screw

17-0"

No. of Blades

4

State whether moveable

no

Total surface

106 ft²

No. of Feed pumps

2

Diameter of ditto

3 3/4"

Stroke

28"

Can one be overhauled while the other is at work

yes

Also two

independent

No. of Bilge pumps

2

Diameter of ditto

4 1/2"

Stroke

28"

Can one be overhauled while the other is at work

yes

main feed pumps

10 1/2 x 8 x 21"

No. of Donkey Engines

4

Sizes of Pumps

Gen. Service 12 1/2 x 10 duplex

Feed 7 1/2 x 5 1/2 x 15 duplex

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

Two of 3 1/2 in each hold.

In Engine Room

Five of 3 1/2

One of 3 in tunnel

No. of Bilge Injections

1

size

8"

Connected to condenser, or to circulating pump

C.P.

To a separate Donkey Suction fitted in Engine room & size

3 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

none

How are they protected

yes

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

Is the Screw Shaft Tunnel watertight

see ship report

Is it fitted with a watertight door

yes

worked from

upper grating

BOILERS, &c.—(Letter for record

V.)

Manufacturers of Steel

J. Spencer & Sons Ltd.

Total Heating Surface of Boilers

7665 ft²

Is Forced Draft fitted

yes

No. and Description of Boilers

3 single ended

Working Pressure

200 lb.

Tested by hydraulic pressure to

400 lb.

Date of test

12.8.20

No. of Certificate

3579.

Can each boiler be worked separately

yes

Area of fire grate in each boiler

62 ft²

No. and Description of Safety Valves to

each boiler

2 direct spring

Area of each valve

9.62 ft²

Pressure to which they are adjusted

205 lb.

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

11 1/2"

Mean dia. of boilers

15-0"

Length

12-2"

Material of shell plates

Steel

Thickness

1 3/32"

Range of tensile strength

28/30

Are the shell plates welded or flanged

yes

Descrip. of riveting: cir. seams

J.R. & L.

long. seams

J.R. & L.

Diameter of rivet holes in long. seams

1 7/16"

Pitch of rivets

9 3/4"

Lap of plates or width of butt straps

21"

Per centages of strength of longitudinal joint

rivets 88.1

plate 85.4

Working pressure of shell by rules

214

Size of manhole in shell

12" x 16"

Size of compensating ring

flanged

No. and Description of Furnaces in each boiler

3 morisons

Material

steel

Outside diameter

3'-10 1/2"

Length of plain part

top 19"

bottom 32"

Thickness of plates

top 19"

bottom 32"

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

204

Pitch of stays to ditto: Sides

8 1/2 x 9

Back

8 3/4 x 8 3/4

Top

7 3/4 x 9 1/2

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

214

Material of stays

Iron

Area at smallest part

2.43 ft²

Area supported by each stay

8 3/4 x 8 3/4

Working pressure by rules

238

End plates in steam space:

Material

steel

Thickness

1 1/32"

Pitch of stays

19 1/2 x 21

How are stays secured

on & w.

Working pressure by rules

208

Material of stays

steel

Area at smallest part

8.45 ft²

Area supported by each stay

19 1/2 x 21

Working pressure by rules

214

Material of Front plates at bottom

steel

Thickness

1"

Material of Lower back plate

steel

Thickness

1 1/16"

Greatest pitch of stays

13 1/2 x 8 3/4

Working pressure of plate by rules

226

Diameter of tubes

2 1/2"

Pitch of tubes

3 3/4 x 3 3/4

Material of tube plates

steel

Thickness: Front

1"

Back

3/4"

Mean pitch of stays

7 1/2 x 7 1/2

Pitch across wide water spaces

13 1/2"

Working pressures by rules

211

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

10 3/4 x 1 3/4

Length as per rule

36 3/8

Distance apart

9 5/8"

Number and pitch of stays in each

three

7 3/4"

Working pressure by rules

217

Steam dome: description of joint to shell

none

% of strength of joint

Diameter

yes

Thickness of shell plates

yes

Material

yes

Description of longitudinal joint

yes

Diam. of rivet holes

yes

Pitch of rivets

yes

Working pressure of shell by rules

yes

Crown plates

yes

Thickness

yes

How stayed

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

✓

SPARE GEAR. State the articles supplied:— 2 Bolts & Nuts for Con. rod top & bottom ends. 2 ditto for main bearings 2 sets coupling bolts & nuts. 1 set feed, bilge & air pump valves. 1/2 crank shaft. 1 screw shaft 1 main bearing 1 pair crank pin bearings 1 pair crosshead bearings 1 eccentric strap. 1 piston rod. 1 slide rod. 1 air pump rod. 1 feed pump ram 1 bilge pump ram. 1 set H.P. piston springs 1 set H.P. M.P. L.P. piston rings 5% boiler tubes 4% Condenser tubes. Various spare parts for circulating & fan engines & donkey pumps. 1 Propeller. Bolts, nuts & iron assorted.

The foregoing is a correct description,

FOR THE CENTRAL MARINE ENGINE WORKS,

(M. Gray & Co. Ltd.)

John H. Stearnes

Manufacturer.

DIRECTOR: 1912. Sep 27. Oct 13. 27. 27. 27. 31. Nov 3. 4. 6. Dec 7. 8. 15. 16. 17. 22. 1922 Jan 6. 8. 15. 22. Feb 2. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Mar 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Apr 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. May 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Jun 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Jul 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Aug 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Sep 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Oct 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Nov 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Dec 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31.

Is the approved plan of main boiler forwarded herewith yes

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 6.10.20 Slides 11.10.20 Covers 27.9.20 Pistons 11.10.20 Rods 22.6.20

Connecting rods 29.4.20 Crank shaft 7.9.20 Thrust shaft 7.9.20 Tunnel shafts 23.9.20 Screw shaft 1.10.20 Propeller 1.10.20

Stern tube 1.10.20 Steam pipes tested 24.1.22 Engine and boiler seatings 7.10.20 Engines holding down bolts 8.12.20

Completion of pumping arrangements 3.3.21. Boilers fixed 8.12.20 Engines tried under steam 24.11.22

Completion of fitting sea connections 29.9.20 Stern tube 12.10.20 Screw shaft and propeller 14.10.20

Main boiler safety valves adjusted 24.11.22 Thickness of adjusting washers P.P. 1/8" S. 3/4" C.P. 1/4" S. 1/2" S.P. 1/4" S. 1/2"

Material of Crank shaft Ingot S. Identification Mark on Do. 6197 Material of Thrust shaft Ingot S. Identification Mark on Do. 6197.

Material of Tunnel shafts Ingot S. Identification Marks on Do. 6197 Material of Screw shafts Ingot S. Identification Marks on Do. 6197.

Material of Steam Pipes Lap welded steel Test pressure 600 lbs.

Is an installation fitted for burning oil fuel yes Is the flash point of the oil to be used over 150°F. yes

Have the requirements of Section 49 of the Rules been complied with yes

Is this machinery duplicate of a previous case yes. If so, state name of vessel "Saint Rene"

General Remarks (State quality of workmanship, opinions as to class, &c. An evaporator and a feed

heater have been fitted, the shells of which were tested to 50 lbs, and the coils to 400 lb hydraulic pressure.

An oil burning installation fitted "Whites low pressure system"

This vessels machinery has been built and installed

under Special Survey. The materials and workmanship

are good. It has been tried under full steam

at moorings and found satisfactory, and is now

eligible to have the notation L.M.C. 11.22.

The electric light installation remains to be examined at work. The report will be forwarded when survey is completed.

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

+ L.M.C. 11.22. F.D. C.L.

"Fitted for Oil Fuel" 11.22. F.P. above 150°F.

The amount of Entry Fee ... £ 6 : 0 :

Special ... £ 100 : 15 :

Donkey Boiler Fee ... £ ✓ :

Travelling Expenses (if any) £ ✓ :

When applied for,

27 Nov 1922.

When received,

28 Nov 1922.

R.D. Shilston.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 1 DEC. 1922

Assigned + L.M.C. 11.22. F.D. C.L.

Fitted for oil fuel 11.22 F.P. above 150°F.

CERTIFICATE WRITTEN 29.11.22



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