

REPORT ON MACHINERY.

No. 31801
TUE. MAY 4 1920

Date of writing Report

19

When handed in at Local Office

17/4/20 Port of Hull

Received at London Office

No. in Survey held at Reg. Book.

Date, First Survey

28/9/19 Last Survey

(Number of Visits)

32 1/4/1920

on the

S. T. SKULLI FÖBETI

Master

Built at

By whom built

Hull Wether & Gammell

Tons

Gross 349

Net 179

When built

1920

Engines made at

Hull

By whom made

Hull & Holmes Ltd. 1919

when made

1920

Boilers made at

Hull

By whom made

Hull

when made

1920

Registered Horse Power

Owners

Alliance Fishing Co. Ltd.

Port belonging to

Ryckjavik

Nom. Horse Power as per Section 28

92.1

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

No.

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

13-23-37

Length of Stroke

28

Revs. per minute

112

Dia. of Screw shaft

as per rule

7.24

Material of

screw shaft

Steel

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

Length of stern bush

40"

Dia. of Tunnel shaft

as per rule

7.24

Dia. of Crank shaft journals

as per rule

5.99

Dia. of Crank pin

7.24

Size of Crank webs

5x14

Dia. of thrust shaft under

collars

7.24

Dia. of screw

9-9

Pitch of Screw

10-10.5

No. of Blades

4

State whether moveable

No

Total surface

33.4

No. of Feed pumps

One

Diameter of ditto

3"

Stroke

14.25"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

One

Diameter of ditto

3"

Stroke

14.25"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

Two

Sizes of Pumps

5x2.5x5

Flywheel

6x4x6

Donkey

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

In Engine Room

Two

2" Dia.

In Holds, &c.

One

2" Dia.

Each Comp.

No. of Bilge Injections

One

Size

3.5"

Connected to condenser, or to circulating pump

Pump

Is a separate Donkey Suction fitted in Engine room & size

3.5" Dia.

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

for Suction & Winch Pipes

How are they protected

Strong 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

Is the Screw Shaft Tunnel watertight

None

Is it fitted with a watertight door

Yes

worked from

OILERS, &c.—(Letter for record

5)

Manufacturers of Steel

SPENCER & SONS

Total Heating Surface of Boilers

1557

Is Forced Draft fitted

No

No. and Description of Boilers

one

of

with

Working Pressure

200 lbs.

Tested by hydraulic pressure to

400 lbs.

Date of test

31/12/19

No. of Certificate

3413

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

48 sq.

No. and Description of Safety Valves to

each boiler

2 Spring Loaded

Area of each valve

4.9 sq.

Pressure to which they are adjusted

205 lbs.

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers

as above

Mean dia. of boilers

13-6

Length

10-6

Material of shell plates

Steel

Thickness

1.75"

Range of tensile strength

28 to 32 Tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

Double Lap

long. seams

Z.P.D.B.

Diameter of rivet holes in long. seams

1.5"

Pitch of rivets

8 1/2"

Lap of plates or width of butt straps

1 1/2"

Per centages of strength of longitudinal joint

rivets

88%

Working pressure of shell by rules

200 lbs.

Size of manhole in shell

16x12

Size of compensating ring

7x1.5"

No. and Description of Furnaces in each boiler

Three plain

Material

Steel

Outside diameter

40"

Length of plain part

top

6.9"

Thickness of plates

crown

7 1/8"

Description of longitudinal joint

Welded

No. of strengthening rings

one

Working pressure of furnace by the rules

215 lbs.

Combustion chamber plates: Material

Steel

Thickness: Sides

3/4"

Back

3/2"

Top

7/8"

Bottom

3/4"

Pitch of stays to ditto: Sides

9 1/2x9

Back

9x8 1/2

Top

9 1/2x7

If stays are fitted with nuts or riveted heads

None

Working pressure by rules

220 lbs.

Material of stays

Steel

Area at smallest part

2.07

Area supported by each stay

35.5"

Working pressure by rules

215 lbs.

End plates in steam space:

Material

Steel

Thickness

1 1/2"

Pitch of stays

1 1/2x1 1/2"

How are stays secured

T.N.W.

Working pressure by rules

240 lbs.

Material of stays

Steel

Area at smallest part

7.5"

Area supported by each stay

29.7"

Working pressure by rules

260 lbs.

Material of Front plates at bottom

Steel

Thickness

1"

Material of Lower back plate

Steel

Thickness

1"

Greatest pitch of stays

13 1/2x9"

Working pressure of plate by rules

256 lbs.

Diameter of tubes

3 1/2"

Pitch of tubes

5x4 1/2"

Material of tube plates

Steel

Thickness: Front

1"

Back

5/8"

Mean pitch of stays

9 1/2"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

203 lbs.

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

10x1 1/2"

Length as per rule

2-9 1/2"

Distance apart

9 1/2"

Number and pitch of stays in each

3 2 1/2"

Working pressure by rules

215 lbs.

Steam dome: description of joint to shell

Yes

% of strength of joint

Yes

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER. Type

Date of Approval of Plan

Is a Safety Valve fitted to each Section

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:— *Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set coupling bolts & nuts, one set air feed & bilge pump valves, one main & one donkey check valve & seat, donkey pump valves a quantity of bolts & nuts & iron of various sizes.*

The foregoing is a correct description,

FOR CHARLES D. HOLMES & Co. LTD.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1919. Sept. 25. Oct. 6. 13. 29. 30. 31. Nov. 5. 14. 24. 27. 28. Dec. 2. 6. 10. 12. 15. 19.
During erection on board vessel - - - 23. 31. Jan 6. 9. 29. Mar. 4. 28. Apr. 24. 14. 19. 22. 25. 31. Apr. 1.
Total No. of visits 32

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

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 31/10/19 Slides 17/3/20 Covers 17/3/20 Pistons 17/3/20 Rods 2/12/19.
Connecting rods 2/12/19 Crank shaft 12/12/19 Thrust shaft 12/12/19 Tunnel shafts 12/12/19 Screw shaft 28/2/20 Propeller 28/2/20
Stern tube 13/10/19 Steam pipes tested 23/3/20 Engine and boiler seatings 19/3/20 Engines holding down bolts 19/3/20.
Completion of pumping arrangements 31/3/20 Boilers fixed 25/3/20 Engines tried under steam 31/3/20
Completion of fitting sea connections 4/3/20 Stern tube 4/3/20 Screw shaft and propeller 4/3/20.
Main boiler safety valves adjusted 31/3/20 Thickness of adjusting washers *PF 5 1/4*
Material of Crank shaft *STEEL* Identification Mark on Do. *2409* Material of Thrust shaft *STEEL* Identification Mark on Do. *2410*
Material of Tunnel shafts *STEEL* Identification Marks on Do. *2411* Material of Screw shafts *STEEL* Identification Marks on Do. *2486*
Material of Steam Pipes *COPPER* 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 engines & boiler of this vessel have been built under special survey & the materials & workmanship are good. On completion the machinery was tried under full working conditions while moored to the Quay Wall with satisfactory results. The machinery of this vessel is now in a good & efficient condition & eligible in my opinion to have the record L.M.C. 4-20 marked in red in the Society's Register Book.

It is submitted that this vessel is eligible for

THE RECORD + L.M.C. 4-20

The amount of Entry Fee ... £ 1-0-0 When applied for, 28/4/1920
Special ... £ 13-16-0
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : When received, 1/6/20

Committee's Minute

Assigned

FRI. MAY. 7 1920

+ L.M.C. 4-20

CERTIFICATE WRITTEN.

Engineer Surveyor to Lloyd's Register of Shipping.



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