

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

29 JUN 1929

Received at London Office

Date of writing Report. 25.6.29

When handed in at Local Office

27 JUNE 1929

Port of

LIVERPOOL

in Survey held at

Fleetwood

Date, First Survey

April 15th

Last Survey

June 24 1929

g. Book.

1588 on the Steam Trawler "BOSTONIAN"

ex "DRAGON ROUGE"

(Number of Visits 22)

Gross 295 289

Tons Net 93 115

Built at

Middlesbrough

By whom built

Smiths Dock Co Ltd

Yard No. 691

When built 1916

Engines made at

do

By whom made

do

Engine No. 158

when made 1916

Boilers made at

Newcastle

By whom made

Hawthorn Leslie & Co

Boiler No. ✓

when made 1916

Registered Horse Power

87

Owners

Boston Deep Sea Fishing & Ice Co Ltd

Port belonging to

Fleetwood

Horse Power as per Rule

87

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

Made for which Vessel is intended

Fishing

GINES, &c.—Description of Engines

Reciprocating, Triple Expansion, Inverted

Revs. per minute ✓

No. of Cylinders

12½ x 21 x 35

Length of Stroke

26

No. of Cylinders

3

No. of Cranks

3

Crank shaft, dia. of journals

as per Rule 6.81

as fitted 7½

Crank pin dia.

7½

Crank webs

Mid. length breadth 10¾

Mid. length thickness 4 9/16

shrink

Thickness parallel to axis 4 9/16

Thickness around eye-hole 3¼

Intermediate Shafts, diameter

as per Rule

as fitted

Thrust shaft, diameter at collars

as per Rule

as fitted 7½

Main Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted 7 1/16

Is the

screw

shaft fitted with a continuous liner

yes

Bronze Liners, thickness in way of bushes

as per Rule

as fitted 9/16

Thickness between bushes

as per Rule

as fitted parallel

Is the after end of the liner made watertight in the

propeller boss

yes

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

yes

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

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

yes

Is an approved Oil Gland or other appliance fitted at the after end of the tube

propeller, dia.

9-3"

Pitch

10-6"

No. of Blades

4

Material

CI

whether Moveable

No

Total Developed Surface

30

sq. feet

Main Pumps worked from the Main Engines, No.

1

Diameter

27/8

Stroke

20

Can one be overhauled while the other is at work

Auxiliary Pumps worked from the Main Engines, No.

1

Diameter

27/8

Stroke

20

Can one be overhauled while the other is at work

No. and size

2-4x6x6

How driven

Steam

Pumps connected to the

Main Bilge Line

No. and size

27/8 x 20 (1) And 4x6x6 (2)

How driven

Main Engines

Steam

Lubricating Oil Pumps, including Spare Pump, No. and size

2-4x6x6

Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary

two independent means arranged for circulating water through the

Oil Cooler

In Engine and Boiler Room

3-2¼"

Holds, &c.

Fishroom, forehold, forepeak, (2¼")

Also ejector pump to fish room.

See over.

Main Water Circulating Pump Direct Bilge Suctions, No. and size

1-3¾"

Independent Power Pump Direct Suctions to the Engine Room Bilges

No. and size

1-2¼"

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

yes

the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

yes

all Sea Connections fitted direct on the skin of the ship

yes

Are they fitted with Valves or Cocks

both

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

yes

Are the Overboard Discharges above or below the deep water line

Above

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

Pipes pass through the bunkers

Forehold & fishroom suction

ditto

How are they protected

Cement & wood

Pipes pass through the deep tanks

ditto

Have they been tested as per Rule

yes

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

yes

the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

apartment to another

yes

Is the Shaft Tunnel watertight

none

Is it fitted with a watertight door

no

worked from

MAIN BOILERS, &c.—(Letter for record)

s

Total Heating Surface of Boilers

1619

sq. feet

Forced Draft fitted

no

No. and Description of Boilers

One S.E. Horizontal Multitubular

Working Pressure

180

lb./sq. in.

S A REPORT ON MAIN BOILERS NOW FORWARDED?

Yes

S A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

Yes

PLANS.

Are approved plans forwarded herewith for Shafting

none

Main Boilers

yes

Auxiliary Boilers

yes

Donkey Boilers

yes

(If not state date of approval)

Superheaters

yes

General Pumping Arrangements

yes

Oil fuel Burning Piping Arrangements

yes

PARE GEAR. State the articles supplied:—

Main Eng. Piston Rod

2

Thrust Shafts with liners

1

Pr. Centr. Eng. B.E. brass

do

Value Rod

1

Pr. Centr. Eng. B.E. brass

do

Ecc. Strap

1

Pr. Dynamo Eng. do

do

B.E. brass

1

Dynamo Eng. Ecc Strap

do

T.E. brass

do

1

Pr. Centr. Eng. TE brass

do

Value rod brass

1

Cent. Eng. Piston Rod

do

Dynamo Eng. Piston Rod

do

Value rod

1

Main Check Valve

do

Coupling bolts

1

Donkey Check Valve

do

Donkey Water end cover

do

6

do

do

do

do

do

do

do

do

do

do

do

do

do

do

do

do

do

do

2

Pr. pump link brass

do

5

Donkey W.E. bucket rings

do

1

Spare Feed ram & neck ring

do

1

Donkey piston Rod

do

3

Set Air Pumps Head valves

do

1

Set Feed pump valves

do

do

1

Set Bilge

do

3

Boiler tube stoppers complete

do

do

do

do

do

do

do

do

do

do

do

do

do

do

1

Main Check Valve

do

1

Donkey Check Valve

do

do

do

do

do

do

do

do

do

do

do

do

do

do

1

Main Check Valve

do

1

Donkey Check Valve

do

do

do

do

do

do

do

do

do

During progress of work in shops - -

Dates of Survey while building

During erection on board vessel - - -

Total No. of visits

24.4.29

24.4.29

24.4.29

Dates of Examination of principal parts—Cylinders

24.4.29

Slides

24.4.29

Covers

24.4.29

Pistons

24.4.29

Piston Rods

24.4.29

Connecting rods

24.4.29

Crank shaft

24.4.29

Thrust shaft

17.5.29

Intermediate shafts

✓

Tube shaft

✓

Screw shaft

17.5.29

Propeller

17.5.29

Stern tube

17.5.29

Engine and boiler seatings

24.4.29

Engines holding down bolts

24.4.29

Completion of fitting sea connections

✓

Boilers fixed

✓

Engines tried under steam

20.6.29

Completion of pumping arrangements

✓

Thickness of adjusting washers

Port 9/32. S. 5/16"

Main boiler safety valves adjusted

20.6.29

Identification Mark

2983, 27.5.16

Thrust shaft material

✓

Identification Mark

✓

Crank shaft material

✓

Identification Marks

✓

Tube shaft, material

✓

Identification Mark

✓

Intermediate shafts, material

✓

Identification Mark

✓

Steam Pipes, material

Copper

Test pressure

360 lb/y

Date of Test

26.4

Screw shaft, material

✓

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 the Rules for the use of oil as fuel been complied with

✓

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo

✓

If so, have the requirements 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 was not built under Special Survey with Lloyd's Register but has now been opened out, examined, and the particulars noted above.

The Boiler, which is reported separately, has been examined under hydraulic pressure of 320 lb/y, and under steam, and the safety valves adjusted to a working pressure of 180 lb/y, and an accumulation test carried out satisfactorily.

The Material & workmanship appear to be of good quality, and when examined under working conditions, the machinery was found entirely satisfactory.

The Machinery in my opinion is eligible to have the notation of LMC 6.29, & record of screw shaft seen CL 6.29 posted to the Register Book.

For particulars of survey of LMC see attached report.

The vessel is fitted with an electric light installation which has been examined under full working load and found satisfactory.

Dynamo made by Sunderland Forge Co. Direct Current Cont. Rating Comp. Wound 15.2 K.W. 100 Volts 152 amps. 325 RPM. Aug. 1918 N: 20458 (Eng: 20318).

NOTE: Main Engine Bilge Pumps draw from F.P.T., forehold, fishroom, E & B rooms, & sea.

Ejector Pump from Fish room & E & B spaces only.

Both Donkeys interconnected, draw from: Hotwell, forepeak, forehold, E & B spaces; and sea.

Also connected to circulate condenser & to deck.

The amount of Entry Fee ... £

Special ... £

Donkey Boiler Fee ... £

Travelling Expenses (if any) £

When applied for, 19

When received, 19

Committee's Minute

LIVERPOOL

28 JUNE 1929

Assigned

See accompanying

pt 8.

Engineer Surveyor to Lloyd's Register of Shipping.

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