

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

18 OCT 1933

Date of writing Report

19

When handed in at Local Office

17 OCT 1933

Port of

Hull

No. in Survey held at
Reg. Book.

Hull

Date, First Survey 30. 6. 33

Last Survey 5. 10. 1933

17720 on the Steam Trawler "ARAB"

(Number of Vials)

220

Gross 421.9
Tons Net 161.74

Built at

Beverly

By whom built

Cock, Walton & Furness Ltd

Yard No. 578

When built

1933

Engines made at

Hull

By whom made

Charles Stephens & Co Ltd

Engine No. 1441

When made

1933

Boilers made at

Hull

By whom made

do

Boiler No. 1441

When made

1933

Registered Horse Power

Owners

Hellyer Bros Ltd

Port belonging to

Hull

Horse Power as per Rule

111

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

Use for which Vessel is intended

Fishing

LINES, &c.—Description of Engines

Triple Expansion

Revs. per minute

No. of Cylinders

132

24

39

Length of Stroke

24

No. of Cylinders

3

No. of Cranks

3

Crank shaft, dia. of journals

as per Rule

7.67

Crank pin dia.

7.67

Crank webs

Mid. length breadth

4.44

Thickness parallel to axis

5

Intermediate Shafts, diameter

as per Rule

7.67

as fitted

7.67

Thrust shaft, diameter at collars

as per Rule

7.67

as fitted

7.67

Thickness around eye-hole

3.5

Screw Shafts, diameter

as per Rule

7.67

as fitted

7.67

Screw Shaft, diameter

as per Rule

7.67

as fitted

7.67

Is the tube

screw

shaft fitted with a continuous liner

Yes

Liner Liners, thickness in way of bushes

as per Rule

9.16

as fitted

9.16

Thickness between bushes

as per Rule

9.16

as fitted

9.16

Is the after end of the liner made watertight in the

Miller boss

Yes

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

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

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

If so, state type

Yes

Length of Bearing in Stern Bush next to and supporting propeller

36

Propeller, dia. 10'-3"

Pitch

10'-10 1/2"

No. of Blades

4

Material

C.I.

whether Movable

No

Total Developed Surface

38

sq. feet

Main Pumps worked from the Main Engines, No. One

Diameter

3"

Stroke

15"

Can one be overhauled while the other is at work

Yes

Main Pumps worked from the Main Engines, No. One

Diameter

3"

Stroke

15"

Can one be overhauled while the other is at work

Yes

No. and size

One

6" x 3 1/2" x 6"

Pumps connected to the

Main Bilge Line

No. and size

One

7" x 5" x 6"

How driven

Steam

How driven

One

7" x 5" x 6"

Pumps connected to the

Main Bilge Line

No. and size

One

7" x 5" x 6"

How driven

Steam

Fast Pumps, No. and size

One

7" x 5" x 6"

Pumps connected to the

Main Bilge Line

No. and size

One

7" x 5" x 6"

How driven

Steam

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

One

7" x 5" x 6"

Pumps connected to the

Main Bilge Line

No. and size

One

7" x 5" x 6"

How driven

Steam

Two independent means arranged for circulating water through the

Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary

Pumps;—In Engine and Boiler Room

2 @ 2"

In Holds, &c.

5 @ 2" in holds

1 @ 2" aft peak

Pump Room

2 @ 2"

Four peak

Water Circulating Pump Direct Bilge Suctions, No. and size

One

3 1/4"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

One

3" Ejector

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

Are they fitted with Valves or Cocks

Both

All Sea Connections fitted direct on the skin of the ship

Yes

Are the Overboard Discharges above or below the deep water line

Above

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

Yes

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

Yes

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

Yes

How are they protected

Wood casings

Pipes pass through the bunkers

Forward Suctions.

Have they been tested as per Rule

Yes

Pipes pass through the deep tanks

Yes

Are they fitted with a watertight door

Worked from

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

Yes

Is the Shaft Tunnel watertight

Yes

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

Department to another

Yes

Is it fitted with a watertight door

Worked from

Main BOILERS, &c.—(Letter for record

S.)

Total Heating Surface of Boilers

1940 Sq. feet

Boiler Draft fitted

No

No. and Description of Boilers

1 Single ended

Working Pressure

210 lbs.

A REPORT ON MAIN BOILERS NOW FORWARDED?

Yes

A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

Yes

Donkey boiler intended to be used for domestic purposes only

Yes

ANS. Are approved plans forwarded herewith for Shafting

Yes

Main Boilers

Yes

Auxiliary Boilers

Yes

Donkey Boilers

Yes

(If not state date of approval)

General Pumping Arrangements

Yes

Oil fuel Burning Piping Arrangements

Yes

SPARE GEAR.

Yes

Spare gear required by the Rules been supplied

Yes

The principal additional spare gear supplied

Safety valve spring.

Main

key

check valves.

Feed pump ram.

Impeller shaft for centrifugal pump

The foregoing is a correct description,

FOR CHARLES D. HOLMES & CO., LTD.

Manufacturer.

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Lloyd's Register

Foundation

W414-0047

1933.
During progress of work in shops - June 30, July 17, Aug. 14, 15, 10, 15, 21, 22, 29, Sep. 4, 5, 12, 15, 20, 27, 28, 29 Oct. 4, 5
Dates of Survey while building During erection on board vessel - - -
Total No. of visits 20

Dates of Examination of principal parts - Cylinders 29.8.33 Slides 12.9.33 Covers 29.8.33
Pistons 12.9.33 Piston Rods 4.9.33 Connecting rods 4.9.33
Crank shaft 4.9.33 Thrust shaft 15.8.33 Intermediate shafts 29.8.33
Tube shaft ✓ Screw shaft 21.8.33 Propeller 21.8.33
Stern tube 21.8.33 Engine and boiler seatings 27.9.33 Engines holding down bolts 27.9.33
Completion of fitting sea connections 5.9.33
Completion of pumping arrangements 4.10.33 Boilers fixed 27.9.33 Engines tried under steam 4.10.33
Main boiler safety valves adjusted 4.10.33 Thickness of adjusting washers 3/8" or 1/2"
Crank shaft material Steel Identification Mark Lloyd 826 Thrust shaft material Steel Identification Mark Lloyd 826
Intermediate shafts, material Steel Identification Marks Lloyd 826 Tube shaft, material Steel Identification Mark
Screw shaft, material Steel Identification Mark Lloyd 826 Steam Pipes, material S. 5. 11. 33 Test pressure 420 lbs. Date of Test 28.9.33
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 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 ✓
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with ✓
Is this machinery duplicate of a previous case ✓ If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been built under special survey & the materials and workmanship are sound & good. It has been satisfactorily fitted on board, tried under steam & found good. It is eligible in my opinion to have marks of + Blue. 10 33 C.L.

The amount of Entry Fee ... £ 3 : : When applied for,
Special ... £ 27 : 15 : 11.10.19 33
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ : : 11-11-33

John H. Mackenzie
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE, 24 OCT 1933
Assigned + Linc. 10.33
CL