

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

13 SEP 1930

Date of writing Report

19

When handed in at Local Office

12. 9. 1930 Port of

HULL

No. in Survey held at  
Reg. Book.

HULL

Date, First Survey

May 10th

Last Survey

Sept. 8th

1930

on the STEAM TRAWLER "ARKWRIGHT"

(Number of Visits)

Gross 369.48  
Net 148.90

Built at

Beverley

By whom built

Book, Welton &amp; Gemmell Ltd

Yard No.

549

When built

1930

Engines made at

Hull

By whom made

Charles D Holmes &amp; Co Ltd

Engine No.

1404

When made

1930

Boilers made at

Hull

By whom made

Charles D. Holmes &amp; Co Ltd

Boiler No.

1404

When made

1930

Registered Horse Power

Owners

J &amp; T. Ross Ltd.

Port belonging to

Hull

Nom. Horse Power as per Rule

96

Is Refrigerating Machinery fitted for cargo purposes

Yes

Is Electric Light fitted

Yes

Trade for which Vessel is intended

Fishing

## ENGINES, &amp;c.—Description of Engines

Triple Expansion

Revs. per minute

Dia. of Cylinders

13" 23" 37"

Length of Stroke

26"

No. of Cylinders

3

No. of Cranks

3

Crank shaft, dia. of journals

as per Rule

4.2"

Crank pin dia.

4.2"

Crank webs

Mid. length breadth

4.4"

Thickness parallel to axis

4.7/8"

Intermediate Shafts, diameter

as per Rule

as fitted

none

Thrust shaft, diameter at collars

as per Rule

7.2"

as fitted

7.2"

Tube Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

8.7"

Is the { tube } shaft fitted with a continuous liner {

yes

Bronze Liners, thickness in way of bushes

as per Rule

as fitted

1/16"

Thickness between bushes

as per Rule

as fitted

3/8"

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

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

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

shaft

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller

36"

Propeller, dia.

10'-0"

Pitch

10'-6"

No. of Blades

4

Material

C.I.

whether Movable

no

Total Developed Surface

37.5' sq. feet

Feed Pumps worked from the Main Engines, No.

One

Diameter

2 5/8"

Stroke

14 3/4"

Can one be overhauled while the other is at work

yes

Bilge Pumps worked from the Main Engines, No.

One

Diameter

2 5/8"

Stroke

14 3/4"

Can one be overhauled while the other is at work

yes

Feed Pumps

No. and size

6" x 3 1/2" x 6"

Pumps connected to the

No. and size

6" x 4 1/4" x 6" + 3" ejector

How driven

Steam

Main Bilge Line

How driven

Steam

Ballast Pumps, No. and size

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

Are two independent means arranged for circulating water through the Oil Cooler

Bilge Pumps;—In Engine and Boiler Room

2 @ 2"

In Pump Room

In Holds, &amp;c.

Suctions, connected to both Main Bilge Pumps and Auxiliary

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

One 3 1/2"

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

Are 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 &amp; strum

Are all Sea Connections fitted direct on the skin of the ship

yes

Are they fitted with 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 Overboard Discharges 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 pass through the bunkers

Forward Suctions

How are they protected

Wood casing

What pipes pass through the deep tanks

Have they been tested as per Rule

yes

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

yes

Is 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 compartment to another

yes

Is the Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

## MAIN BOILERS, &amp;c.—(Letter for record S ) Total Heating Surface of Boilers

1698 Square feet

Is Forced Draft fitted

no

No. and Description of Boilers

One Single Ended

Working Pressure

200 lb

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

yes

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

yes

Is the donkey boiler intended to be used for domestic purposes only

PLANS. Are approved plans forwarded herewith for Shafting  
(If not state date of approval)

Main Boilers

yes

Auxiliary Boilers

yes

Donkey Boilers

yes

Superheaters

yes

General Pumping Arrangements

yes

Oil fuel Burning Piping Arrangements

yes

## SPARE GEAR.

Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied

Two bolts & nuts for top ends, bottom ends & main bearings.  
 Set of coupling bolts & nuts. Spare valves for air, feed, bilge & donkey pumps.  
 Safety valve spring. Main & donkey check valves & seats. Circulating pump impeller & spindle.  
 Feed pump ram. Bolts & iron of various sizes.

The foregoing is a correct description,

For CHARLES D. HOLMES &amp; CO., LTD.

J. Ross

Manufacturer.



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Lloyd's Register  
Foundation

002305-002319-0203



09116

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - -

Total No. of visits

1930. May 10. 12. 16. Jun. 2. 5. 12. 19. 23. July. 1. 5. 12. 29. Aug. 6. 4. 13. 18. Sept. 2. 3. 5.

"THORWRIGHT" STEAM TRAWLER

Dates of Examination of principal parts—Cylinders 12-6-30 Slides 14-5-30 Covers 12-6-30  
Pistons 12-6-30 Piston Rods 14-5-30 Connecting rods 12-6-30  
Crank shaft 1-7-30 Thrust shaft 10-5-30 Intermediate shafts ✓  
Tube shaft ✓ Screw shaft 16-5-30 Propeller 16-5-30  
Stern tube 16-5-30 Engine and boiler seatings 2-9-30 Engines holding down bolts 2-9-30  
Completion of fitting sea connections 29-7-30  
Completion of pumping arrangements 5-9-30 Boilers fixed 2-9-30 Engines tried under steam 5-9-30  
Main boiler safety valves adjusted 5-9-30 Thickness of adjusting washers F 5/16" A 1/2"  
Crank shaft material Steel Identification Mark Lloyd's No Thrust shaft material Steel Identification Mark Lloyd's No  
Intermediate shafts, material ✓ Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓  
Screw shaft, material Steel Identification Mark Lloyd's No Steam Pipes, material SD Copper Test pressure 400 lb sq in Date of Test 3-9-30  
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 no 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 yes If so, state name of vessel "Welsback"

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been built under special survey and the materials and workmanship are sound and good. It has been satisfactorily fitted on board, tried under steam and found in good order. It is eligible, in my opinion, to have the record of L.M.C. 9.30 C.L.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 9.30. C-L.

13/9/30  
B. Moffatt  
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 2 : 0 :  
Special ... £ 24 : 0 :  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : :  
When applied for, 12. 19. 30  
When received, 2/10/30

Committee's Minute FRI. 19 SEP 1930  
Assigned + L.M.C. 9.30 C.L.

CERTIFICATE WRITTEN