

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report

When handed in at Local Office 11 DEC 1934

Port of

HULL

No. in Survey held at

Hull

Date, First Survey 24th Aug 1934

Last Survey 3rd Dec, 1934

Reg. Book.

on the Steel S. K. "St. Achilles"

(Number of Visits 22)

Tons Gross 484.37  
Net 188.82

Built at Beverley

By whom built Cook, Welton &amp; Gemmell Ltd.

Yard No. 595

When built 1934.12

Engines made at Hull

By whom made Charles D. Holmes &amp; Co.

Engine No. 1470

When made 1934.

Boilers made at Hull

By whom made Charles D. Holmes &amp; Co.

Boiler No. 1470

When made 1934.

Registered Horse Power

Owners Thomas Hamlyn &amp; Co. Ltd.

Port belonging to Hull

Nom. Horse Power as per Rule

154

Is Refrigerating Machinery fitted for cargo purposes

No.

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 14 3/4" 25" 41"

Length of Stroke 27"

No. of Cylinders 3

No. of Cranks 3

Crank shaft, dia. of journals as per Rule 8.15"

Crank pin dia. 8.375"

Crank webs Mid. length breadth 15 7/8"

Thickness parallel to axis 5 3/8"

Intermediate Shafts, diameter as per Rule 7.76"

as fitted 7.875"

Thrust shaft, diameter at collars as per Rule 8.15"

as fitted 8.375"

Tube Shafts, diameter as per Rule

Screw Shaft, diameter as per Rule 8.646"

as fitted 8.875"

Is the screw shaft fitted with a continuous liner

Yes

Bronze Liners, thickness in way of bushes as per Rule 19/32"

as fitted 19/32"

Thickness between bushes as per Rule 15/32"

as fitted 15/32"

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

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

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

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

Length of Bearing in Stern Bush next to and supporting propeller

40"

Propeller, dia. 10' 7 1/2" Pitch 10' 10" No. of Blades 4

Material C.S.

whether Moveable

No.

Total Developed Surface 41.5 sq. feet

Feed Pumps worked from the Main Engines, No. 2

Diameter 2 3/4"

Stroke 15"

Can one be overhauled while the other is at work

Yes

Bilge Pumps worked from the Main Engines, No. 2

Diameter 2 3/4"

Stroke 15"

Can one be overhauled while the other is at work

Yes

Feed Pumps No. and size 2 @ 7" x 5" x 6"

Pumps connected to the Main Bilge Line

No. and size 1 @ 7" x 5" x 6" + ejector 3" bore

How driven

Steam

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

Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room

2 @ 2" dia

In Pump Room

In Holds, &amp;c.

5 @ 2" dia

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 4 3/4" dia

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 6 ejector 3" dia

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

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 suction.

How are they protected

Wood casings

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

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

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

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

2402 sq. ft.

Is Forced Draft fitted

Yes

No. and Description of Boilers

One single ended.

Working Pressure

215 lb. sq. in.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? No. already forwarded with report 45298.

IS A DONKEY BOILER FITTED? No.

If so, is a report now forwarded?

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

PLANS. Are approved plans forwarded herewith for Shafting

Main Boilers

Auxiliary Boilers

Donkey Boilers

(If not state date of approval)

Superheaters

General Pumping Arrangements

Oil fuel Burning Piping Arrangements

## SPARE GEAR.

Has the spare gear required by the Rules been supplied

Yes

State the principal additional spare gear supplied

Air, feed, bilge and duplex pump valves.  
Main & donkey check valves.  
centrifugal pump impeller shaft.  
feed pump plunger.The foregoing is a correct description,  
FOR CHARLES D. HOLMES & CO., LTD.

Manufacturer.

W79-0142



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Lloyd's Register  
Foundation



During progress of work in shops - - 1934

Dates of Survey while building - - Aug 24, Sept 2, 5, 13, 18, Oct 2, 6, 9, 12, 18, 19, 26, 30.  
During erection on board vessel - - Nov. 6, 7, 15, 22, 26, 27, 30. Dec 3.

Total No. of visits 22.

Dates of Examination of principal parts—Cylinders 6-11-34 Slides 6-11-34 Covers 6-11-34.

Pistons 6-11-34 Piston Rods 6-11-34 Connecting rods 6-11-34.

Crank shaft 30-10-34 Thrust shaft 18-10-34 Intermediate shafts 6-10-34.

Tube shaft - Screw shaft 6-10-34 Propeller 2-10-34.

Stern tube 2-10-34 Engine and boiler seatings 22-11-34 Engines holding down bolts 22-11-34.

Completion of fitting sea connections 9-10-34.

Completion of pumping arrangements 30-11-34 Boilers fixed 22-11-34 Engines tried under steam 30-11-34.

Main boiler safety valves adjusted 30-11-34 Thickness of adjusting washers F 3/8" A 3/8 Superheater 1/4"

Crank shaft material Steel Identification Mark 885 Thrust shaft material Steel Identification Mark 885

Intermediate shafts, material Steel Identification Marks 885 Tube shaft, material - Identification Mark -

Screw shaft, material Steel Identification Mark 885 Steam Pipes, material S.D. Steel Test pressure 645#. Date of Test 31/10/34 @ Sheffield

Is an installation fitted for burning oil fuel ho Is the flash point of the oil to be used over 150°F. 300

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 ho 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 "Pentland Firth"

**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 order. It is eligible in my opinion, to have record H.L.M.C. 12, 34. C.L.

The amount of Entry Fee ... £ 3 : 0 : ✓  
Special ... £ 38 : 10 :  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : :  
When applied for, 17 DEC 1934  
When received, 1-1-19 34 J.D. 2/1

B. Moffatt.  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
Assigned  
+ Lmb 12.34 J.D., C.L.