

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

13 SEP 1930

Date of writing Report

19

When handed in at Local Office

11 SEP. 1930

Port of

LIVERPOOL

No. in Survey held at

Queensferry

Date, First Survey

3/6/30

Last Survey

28/8/1930

Reg. Book

89058 on the S.S. Brightside

(Number of Visits)

7

Gross

476

Net

189

Built at Queensferry

By whom built

Abdela Mitchell & Co

Yard No.

464

When built

1930

Engines made at

Brimscombe

By whom made

Abdela Mitchell

Engine No.

1448

When made

1930

Boilers made at

Wallsend

By whom made

North Eastern Iron Works

Boiler No.

2482

When made

1930

Registered Horse Power

Owners

Ultham Shipping Co Ltd

Port belonging to

Liverpool

Nom. Horse Power as per Rule

80

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

Trade for which Vessel is intended

## ENGINES, &c.—Description of Engines

Vertical Compound Condensing

Revs. per minute

110

Dia. of Cylinders

18" x 38"

Length of Stroke

27"

No. of Cylinders

2

No. of Cranks

2

Crank shaft, dia. of journals

as per Rule

8"

Crank pin dia.

8"

Crank webs

Mid. length breadth

10 1/2"

Thickness parallel to axis

6"

Intermediate Shafts, diameter

as per Rule

as fitted

none

Thrust shaft, diameter at collars

as per Rule

as fitted

8"

Tube Shafts, diameter

as per Rule

as fitted

1"

Screw Shaft, diameter

as per Rule

as fitted

8 5/16"

Is the screw shaft fitted with a continuous liner

Yes

Bronze Liners, thickness in way of bushes

as per Rule

as fitted

5/16"

Thickness between bushes

as per Rule

as fitted

4"

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

One length

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

light

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

Yes

Propeller, dia.

9' 6"

Pitch

10' 9"

No. of Blades

4

Material

CJ

whether Moveable

no

Total Developed Surface

32

sq. feet

Feed Pumps worked from the Main Engines, No.

1

Diameter

2 5/8"

Stroke

13 1/2"

Can one be overhauled while the other is at work

Yes

Bilge Pumps worked from the Main Engines, No.

1

Diameter

2 5/8"

Stroke

13 1/2"

Can one be overhauled while the other is at work

Yes

Feed Pumps

No. and size

one 5 1/4 x 3 1/2 x 5" Duplex

Pumps connected to the

Main Bilge Line

No. and size

one - 5 1/4 x 3 1/2 x 5" Duplex

How driven

Steam

Ballast Pumps, No. and size

one - 5 1/4 x 3 1/2 x 5"

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

1

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

Yes

Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room

Two - 2"

In Holds, &c.

Two - 2" in hold

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

one - 3"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

one - 2 1/2"

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 bulwarks

hold bilge suction & forepeak tank

How are they protected

strong wood sheathing

What pipes pass through the deep tanks

Yes

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, &c.—(Letter for record S) Total Heating Surface of Boilers

1380 sq. ft.

Is Forced Draft fitted

no

No. and Description of Boilers

one cylind. truellet

Working Pressure

180 lb. sq.

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

Yes

PLANS. Are approved plans forwarded herewith for Shafting

Yes

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

Yes

State the principal additional spare gear supplied

Two main bearing bolts & nuts, two top & two bottom end bolts & nuts, set of coupling bolts & nuts, set of feed pump & bilge pump valves, a number of condenser tubes & some jacking bolts, assorted bolts & nuts.

The foregoing is a correct description,

Lt. Col. Abdela Mitchell

F. Phillips, Manager

Manufacturer



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Lloyd's Register Foundation

Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - - - 1930  
 June 3. 5. 26. July 22. Aug 14. 19. 25.  
 Total No. of visits 7

Dates of Examination of principal parts—Cylinders ✓ Slides ✓ Covers ✓  
 Pistons ✓ Piston Rods ✓ Connecting rods ✓  
 Crank shaft ✓ Thrust shaft ✓ Intermediate shafts ✓  
 Tube shaft ✓ Screw shaft 5/6/30 Propeller 9/6/30  
 Stern tube 5/6/30 Engine and boiler seatings 5/6/30 Engines holding down bolts 19/8/30  
 Completion of fitting sea connections 9/6/30 Boilers fixed 19/8/30 Engines tried under steam 29/8/30  
 Completion of pumping arrangements 19/8/30 Thickness of adjusting washers 1 1/8" brass  
 Main boiler safety valves adjusted 28/8/30  
 Crank shaft material steel Identification Mark ✓ Thrust shaft material steel Identification Mark 68000  
 Intermediate shafts, material steel ✓ Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material steel Identification Mark 68000 Steam Pipes, material Copper Test pressure 300lb/sq. in. Date of Test See Certs S.S. (copy herewith)  
 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 ss. Cornish Merchant.

General Remarks (State quality of workmanship, opinions as to class, &c.)  
 These engines & boilers (How Built Rpt 572363 & How Rpt 85629) have been satisfactorily fitted on board, & are in accordance with the Rules. They have been examined under full working conditions during steam trial and found satisfactory. An efficient reducing valve has been fitted between boiler and engines, with relief valve (spring loaded) & lift at reduced pressure. (see See letter 30/8/30). This vessel's machinery is now eligible in my opinion for classification in Register book with record of L.M.C. 8.30. (working pressure of boiler 180lb/sq. reduced to 130lb/sq. at engine).

180 1/2 + L.M.C. 8.30 C-L  
 130 1/2 at engine.

J. J. 23/9/30

N.B. Engines & Boilers accepted as new 1930

The amount of Entry Fee ... £ : : When applied for, 12 SEP 1930  
 Special 15 1/2 ... £ 4 : 0 : 2  
 Donkey Boiler Fee ... £ : : When received, 27.10.1930  
 Travelling Expenses (if any) £ 1.12.6

J. J. Milton  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL 12 SEP. 1930

Assigned + L.M.C. 8:30  
 J.L.C.B.

Certificate to be sent to the Surveyors are requested not to write on or below the space for Committee's Minute.

