

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

OCT 10 1940

Date of writing Report

19

When happened in at Local Office

7. 10. 1940 Port of GLASGOW

No. in Survey held at
Reg. Book.

87256 on the

S/S

"BENALBANACH"

Date, First Survey

4th Jan 1940

Last Survey

27th Sept. 1940

(Number of Visits)

78

Tons

Gross

7200

Net

Built at

Glasgow

By whom built

Chas. Connell & Co. Ltd.

Yard No.

429

When built

1940

Engines made at

-do-

By whom made

David Rowan & Co. Ltd.

Engine No.

1042 when made

1940

Boilers made at

-do-

By whom made

-do-

Boiler No.

1042 when made

1940

Registered Horse Power

-

Owners

Ben Line Steamers, Ltd.

Port belonging to

Leith

Nom. Horse Power as per Rule

700

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines

Quadruple expansion

Revs. per minute

Dia. of Cylinders

27 1/2"-38"-54"-77"

Length of Stroke

51"

No. of Cylinders

4

No. of Cranks

4

Crank shaft, dia. of journals

as per Rule 15.383"

as fitted 15 3/4"

Crank pin dia.

15 3/4"

Crank webs

Mid. length breadth

2'-1"

Thickness parallel to axis

10 1/2"

Intermediate Shafts, diameter

as per Rule 14.65"

as fitted 14 7/8"

Thrust shaft, diameter at collars

as per Rule 15.383"

as fitted 15 3/4"

Tube Shafts, diameter

as per Rule -

as fitted -

Screw Shaft, diameter

as per Rule 16.15"

as fitted 16 7/8"

Is the

screw

shaft fitted with a continuous liner

Yes

Bronze Liners, thickness in way of bushes

as per Rule .793"

as fitted 13/16"

Thickness between bushes

as per Rule .595"

as fitted 3/4"

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.

-

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

-

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

shaft

No

If so, state type

-

Length of Bearing in Stern Bush next to and supporting propeller

5'-8"

Propeller, dia.

18'-0"

Pitch

18'-0"

No. of Blades

4

Material

Bronze

whether Moveable

No

Total Developed Surface

114

sq. feet

Feed Pumps worked from the Main Engines, No.

2

Diameter

4 1/4"

Stroke

27"

Can one be overhauled while the other is at work

Yes

Bilge Pumps worked from the Main Engines, No.

2

Diameter

4 1/2"

Stroke

27"

Can one be overhauled while the other is at work

Yes

Feed

Pumps

No. and size

One @ 12"-9"x24"

Pumps connected to the

Main Bilge Line

No. and size

Ballast Pump. Sanitary Pump 7"-7"x8"

How driven

Steam

How driven

Steam

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

-

Ballast Pumps, No. and size

One 10"-10"x10"

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

3 @ 3"

One @ 2"

In Holds, &c.

Nº 1 Hold 2 @ 3"; Nº 2 Hold 2 @ 4" Nº 3 Hold 2 @ 4"; Nº 4 Hold 2 @ 3"; Nº 5 Hold 2 @ 2 1/2"

Tunnel well

One at 2 1/2"

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

One @ 12"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

One @ 5"

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

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

both

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

none

How are they protected

-

What pipes pass through the deep tanks

-

Have they been tested as per Rule

-

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

upper deck

MAIN BOILERS, &c.—(Letter for record

S)

Total Heating Surface of Boilers

10,486

sq. ft.

Is Forced Draft fitted

Yes

No. and Description of Boilers

3 Single-ended

Working Pressure

220 lb.

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

Yes

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

-

PLANS. Are approved plans forwarded herewith for Shafting

(If not state date of approval)

Main Boilers

Yes

Auxiliary Boilers

-

Donkey Boilers

-

Superheaters

-

General Pumping Arrangements

Yes

Oil fuel Burning Piping Arrangements

Yes

SPARE GEAR. State the articles supplied:—

As per attached list

The foregoing is a correct description,

For David Rowan & Co. Ltd.
Arch. N. Grierson

Manufacturer.



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Lloyd's Register
Foundation

W150-0030

In a Report also sent on the Hull of the Ship? If not, state whether, and when, one will be sent?

NOTE. The words which do not apply should be deleted.

Dates of Survey while building
During progress of work in shops -- 1940 Jan: 4.12.25.30 Feb: 15.23.27 Mar: 11.21.26 Apr: 3.11.16.17.26.30 May: 8.9.17.20.22
During erection on board vessel --- 23.24.27.28.29 June: 3.6.7.10.11.12.13.14.17.20.22.24.25.26.27.28 July: 1.2.5.8.9.11.12.16.17
22.24.25.29.31 Aug: 5.6.7.8.9.12.13.14.16.20.22.23.27.28.30 Sep: 2.4.5.6.12.25.27
Total No. of visits 78

Dates of Examination of principal parts—Cylinders 12-6-40 Slides 24-6-40 Covers 12-6-40
Pistons 24-6-40 Piston Rods 6-6-40 Connecting rods 6-6-40
Crank shaft 17-6-40 Thrust shaft 10-6-40 Intermediate shafts 7-6-40
Tube shaft - Screw shaft 27-5-40 Propeller 31-7-40
Stern tube 20-5-40 Engine and boiler seatings 17-6-40 Engines holding down bolts 30-8-40
Completion of fitting sea connections 17-6-40
Completion of pumping arrangements 27-9-40 Boilers fixed 30-8-40 Engines tried under steam 27-9-40
Main boiler safety valves adjusted 12-9-40 Thickness of adjusting washers P 3/8" 7/16" C 7/16" 3/8" S 3/8" 7/16"
Crank shaft material S.M. Steel Identification Mark 8968 H.A.I. Thrust shaft material S.M. Steel Identification Mark 8968 H.A.I.
Intermediate shafts, material S.M. Steel Identification Marks 8968 H.A.I. Tube shaft, material - Identification Mark -
Screw shaft, material S.M. Steel Identification Mark 8968 H.A.I. Steam Pipes, material Steel Test pressure 660 lbs. Date of Test July & Aug. 1940
Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes
Have the requirements of the Rules for the use of oil as fuel been complied with Yes
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 -
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. This machinery has been built under special survey in accordance with the Rules and approved plans, and the materials and workmanship are good. It has been satisfactorily installed in the vessel, tested under working conditions at full load and found efficient and, in my opinion, is eligible to be classed in the Register Book with record + LMC 9,40 and notation CL

Gib
7/10/40

The amount of Entry Fee ... £ 6 : - : When applied for,
Special ... £ 110 : - : 8 - OCT 1940
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ : : 14-10-1940

Committee's Minute GLASGOW 8 - OCT 1940

Assigned -/- Lmc 19,40 J.D.

Engineer Surveyor to Lloyd's Register of Shipping.