

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

1929

Date of writing Report

19

When handed in at Local Office

3.6

1929

Port of

Glasgow

No. in Survey held at

Glasgow

Date, First Survey

1

11

28

Last Survey

31.5.29

Reg. Book.

on the new steel S/S "BENWYVIS".

(Number of Visits)

67

Gross 5920

Net 3751

When built 1929

Built at

Glasgow

By whom built

Blas Bonnell & Co. Ltd

Yard No. 414

Engines made at

Glasgow

By whom made

David Rowan & Co.

Engine No. 900

when made 1929

Boilers made at

Glasgow

By whom made

David Rowan & Co.

Boiler No. 900

when made 1929

Registered Horse Power

Owners Ben Line Steamers Ltd

Port belonging to

Leith

Nom. Horse Power as per Rule

675

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

Trade for which Vessel is intended

General cargo - Eastern trade.

ENGINES, &c.—Description of Engines

Quadruple expansion

Revs. per minute 75

Dia. of Cylinders 24 3/4" - 35 1/2" - 51" - 73"

Length of Stroke 51"

No. of Cylinders 4

No. of Cranks 4

Crank shaft, dia. of journals

as per Rule 14 1/4"

Crank pin dia. 4 3/4"

Crank webs

Mid. length breadth 22 1/2"

Thickness parallel to axis 9 3/4"

Intermediate Shafts, diameter

as per Rule 13 7/8"

Thrust shaft, diameter at collars

as per Rule 14 43/64"

as fitted 15"

Tube Shafts, diameter

as per Rule 16"

Screw Shaft, diameter

as per Rule 16"

Is the tube shaft fitted with a continuous liner

yes

Bronze Liners, thickness in way of bushes

as per Rule 3/4"

Thickness between bushes

as per Rule 1/16"

Is the after end of the liner made watertight in the

propeller boss

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

no

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

end of the tube shaft

Length of Bearing in Stern Bush next to and supporting propeller

5' 4"

Propeller, dia. 18' 8"

Pitch 18' 6"

Feed Pumps worked from the Main Engines, No. 2

Diameter 4"

Stroke 27"

Can one be overhauled while the other is at work

yes

Bilge Pumps worked from the Main Engines, No. 2

Feed Pumps

No. and size one @ 12" x 9" x 24"

Pumps connected to the Main Bilge Line

No. and size Ballast pump

also General Bk - 8 1/2" x 8"

How driven Steam

Ballast Pumps, No. and size one @ 10" x 10" x 10"

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

none on board

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

2 @ 3 1/2"

In Holds, &c. No. 1 hold - 2 @ 3 1/2"

No. 2 hold - 2 @ 3 1/2"

No. 3 hold - 2 @ 3 1/2"

No. 4 hold - 2 @ 3 1/2"

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

2 @ 9"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 2 @ 3 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

both

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

yes

What Pipes pass through the bunkers

for main hold suction

How are they protected

under timber boards

What pipes pass through the deep tanks

none

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

Is it fitted with a watertight door

yes

worked from

upper deck

MAIN BOILERS, &c.—(Letter for record S)

Total Heating Surface of Boilers 10430

Is Forced Draft fitted

yes

No. and Description of Boilers 3SB & 1 auxy

Working Pressure 220

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

yes

IS A DONKEY BOILER FITTED?

yes

If so, is a report now forwarded?

yes

PLANS. Are approved plans forwarded herewith for Shafting

no

Main Boilers

yes

Auxiliary Boilers

yes

Donkey Boilers

no

Superheaters

no

General Pumping Arrangements

Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—

As per Rules and in addition, — two bottom end

bearings, one 14P piston ring, one impeller and a shaft for circulating pump,

four propeller blades and one screw shaft.

The foregoing is a correct description,

For David Rowan & Co. Ltd

Arch. H. Grierson

Manufacturer.

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

Is a Report also sent on the Hull of the Ship?

If not, state whether, and when, one will be sent?

Yes

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No

Dates of Survey while building		Total No. of visits	
During progress of work in shops - -	1928 Nov. 1. 2. 5. 7. 11 Dec. 19. 26 (1929) Jan. 11. 22. 23. 25. 28 Feb. 12. 15. 18. 25. 27. 28 Mar. 1. 4. 5. 6. 8. 14. 15. 18. 19 20. 21. 22. 25. 26. 27. 29 Apr. 2. 3. 4. 8. 9. 10. 11. 12. 15. 16. 17. 18. 20. 22. 23. 24. 25. 26. 29. 30 May 2. 3. 6. 9. 14. 15. 16	67	
During erection on board vessel - -	17. 20. 21. 24. 30. 31		
Total No. of visits		67	

Dates of Examination of principal parts—Cylinders	1-3-29	Slides	19-3-29	Covers	8-4-29
Pistons	10-4-29	Piston Rods	15-4-29	Connecting rods	23-4-29
Crank shaft	4-4-29	Thrust shaft	29-3-29	Intermediate shafts	4-4-29
Tube shaft	✓	Screw shaft	3-4-29	Propeller	3-4-29
Stern tube	21-3-29	Engine and boiler seatings	17-4-29	Engines holding down bolts	17-5-29
Completion of fitting sea connections	8-4-29	Boilers fixed	30-5-29	Engines tried under steam	31-5-29
Completion of pumping arrangements	30-5-29	Thrust shaft material	✓ steel	Identification Mark	✓
Main boiler safety valves adjusted	24-5-29	Thrust shaft material	✓ steel	Identification Mark	✓
Crank shaft material	✓ steel	Identification Mark	✓	Identification Mark	✓
Intermediate shafts, material	✓ steel	Identification Marks	✓	Identification Mark	✓
Screw shaft, material	✓ steel	Identification Mark	✓	Identification Mark	✓
Is an installation fitted for burning oil fuel	no	Is the flash point of the oil to be used over 150°F.	no		

Have the requirements of the Rules for the use of oil as fuel been complied with no

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 no

Is this machinery duplicate of a previous case yes If so, state name of vessel "Benarashan"

General Remarks (State quality of workmanship, opinions as to class, &c.)

The materials and workmanship are good.
The machinery has been constructed under Special Survey in accordance with the Rules, satisfactorily fitted in the vessel, tried under steam and found good. It is eligible in my opinion for Classification and the record. —
+ LMC 5, 29

It is submitted that
this vessel is eligible for
THE RECORD.

+ L.M.C. 5. 29 C.L. F.D.

6. 6. 29

The amount of Entry Fee	...	£	6	:	:	} When applied for, 3 JUN 1929
Special	...	£	108	:	15	
Donkey Boiler Fee	...	£	:	:	:	} When received, 6. 6. 29
Travelling Expenses (if any)	£	:	:	:	:	

Sch Davis.
Engineer Surceygor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 4 JUN 1929

Assigned + L.M.C. 5.29

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CERTIFICATE WRITTEN

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Lloyd's Register
Foundation