

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

12 MAR 1931

Date of writing Report

19

When handed in at Local Office

2.3.

1931

Port of

Glasgow

No. in Survey held at
Reg. Book.

Glasgow

Date, First Survey

26.8.30

Last Survey

28.2.

1931

on the new steel S/S "DALIA".

Built at

Port Glasgow

By whom built

Robert Duncan & Co. Ltd

Yard No.

400

Tons
Gross
Net

When built

1931

Engines made at

Glasgow

By whom made

David Rowan & Co. Ltd

Engine No.

939

When made

1931

Boilers made at

Glasgow

By whom made

David Rowan & Co. Ltd

Boiler No.

939

When made

1931

Registered Horse Power

Owners

Port belonging to

Duban

Nom. Horse Power as per Rule

506

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Triple expansion

Revs. per minute

75

Dia. of Cylinders

21-44-73

Length of Stroke

48"

No. of Cylinders

3

No. of Cranks

3

Crank shaft, dia. of journals

as per Rule 13.85"

Crank pin dia.

14 1/2"

Crank webs

Mid. length breadth 21"

shrink

Thickness parallel to axis 9"

Intermediate Shafts, diameter

as per Rule

13.2"

as fitted

13 5/8"

Thrust shaft, diameter at collar

as per Rule

13.85"

as fitted

14" (Michell)

Tube Shafts, diameter

as per Rule

-

as fitted

-

Screw Shaft, diameter

as per Rule

14.69"

as fitted

15 1/8"

Is the

tube

screw

shaft fitted with a continuous liner

yes

Bronze Liners, thickness in way of bushes

as per Rule

.749"

as fitted

3/4"

Thickness between bushes

as per Rule

.56"

as fitted

1/16"

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

5-1"

Propeller, dia.

18-0"

Pitch

17-6"

No. of Blades

4

Material

Brnze

whether Moveable

yes

Total Developed Surface

99 sq. feet

Feed Pumps worked from the Main Engines, No.

none

Diameter

-

Stroke

-

Can one be overhauled while the other is at work

-

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 2 @ 10 1/2" - 8 x 22"

How driven

steam

and general service

Pumps connected to the

Main Bilge Line

No. and size

Bend series - 8-5 x 8 & Ballast pump

How driven

steam

steam

Ballast Pumps, No. and size

1 @ 9-12 x 12

Dupn

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

3 @ 2 3/4"

In Pump Room

-

In Holds, &c.

Fitted complete at Greenock. The following sizes are

taken from copy of pumping plan supplied to ship. N-1-2 @ 2 3/4". N-2-2 @ 3 1/2". Deep tank 2 @ 2 1/2". N-3-3 @ 2 1/2". Tunnel well-1 @ 2 1/2".

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

1 @ 8"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

1 @ 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

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

forward hold suction

How are they protected

under timber boards

What pipes pass through the deep tanks

none

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

7401 sq. ft.

Is Forced Draft fitted

yes

No. and Description of Boilers

3 SB

Working Pressure

180

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

yes

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

no

Main Boilers

yes

Auxiliary Boilers

-

Donkey Boilers

-

Superheaters

-

General Pumping Arrangements

with ship report

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

One screw shaft. two cast iron propeller blades, one air pump rod.

one bilge pump ram, one eccentric strap one impeller for circulating pump.

The foregoing is a correct description,

For David Rowan & Co. Ltd

Arch. N. Grierson

Manufacturer.



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Lloyd's Register
Foundation

002630-002638-0148

Dates of Survey while building

During progress of work in shops --

During erection on board vessel --

Total No. of visits

1930 Aug 26 Sep 17 19 24 30 Oct 2 9 10 15 16 22 27 28 30 31 Nov 3 4 5 12 13 14 17 19 20 24 25 26 28 Dec 1 2 3 4 5 8 10 11 15 16 17 18 19 22 23 24 26 29 30 (1931)

Jan 1 12 15 16 19 20 21 22 23 26 27 28 30 Feb 2 3 4 6 7 10 12 13 17 18 23 26 28 29

Mar 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Apr 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

May 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Jun 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Jul 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Aug 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Sep 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Oct 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Nov 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Dec 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Dates of Examination of principal parts—Cylinders 4-12-30 Slides 8-12-30 Covers 11-12-30

Pistons 15-12-30 Piston Rods 18-12-30 Connecting rods 3-11-30

Crank shaft 2-12-30 Thrust shaft 30-12-30 Intermediate shafts 21-11-30

Tube shaft 24-12-30 Screw shafts 24-12-30 19-1-31 Propeller 24-12-30

Stern tube 10-12-30 Engine and boiler seatings Euk Engines holding down bolts 3-2-31

Completion of fitting sea connections Euk Boilers fixed 2-2-31 Engines tried under steam 27-2-31

Completion of pumping arrangements 10-2-31 Thickness of adjusting washers Piston P 5/16 S 3/32 Bent bolts P 3/8 S 3/32 Stand bolts P 3/4 S 3/32

Main boiler safety valves adjusted 13-2-31 Crank shaft material 9. steel Identification Mark LLOYDS No 939 2-12-30

Intermediate shafts, material 9. steel Identification Marks LLOYDS No 939 2-12-30 Thrust shaft material 9. steel Identification Mark LLOYDS No 939 2-12-30

Screw shaft, material 9. steel Identification Mark LLOYDS No 939 24-12-30 Tube shaft, material 9. steel Identification Mark LLOYDS No 939 24-12-30

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 — If so, have the requirements of the Rules 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 no If so, state name of vessel —

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 2, 31

The amount of Entry Fee ... £ 6 : - : When applied for, 9/3/31
Special ... £ 100 : 6 : :
Donkey Boiler Fee ... £ : : : When received, 11/3/31
Travelling Expenses (if any) £ : : :

Committee's Minute GLASGOW 10 MAR 1931

Assigned + L.M.C. 2, 31. Y.S.

CERTIFICATE WRITTEN

S. Davis J. J. Barr.
Engineer Surveyor to Lloyd's Register of Shipping



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