

Rpt. 4.

REPORT ON MACHINERY.

No. 45940

Received at London Office

8 SEP. 1926

Date of writing Report

10

When handed in at Local Office

4-9-26

Port of

Glasgow

No. in Survey held at
Reg. Book.

Glasgow

Date, First Survey

29th Jan

Last Survey

31-8-1926

on the new steel S/S "COUNSELLOR."

(Number of Visits 58)

Gross 5068

Net 3158

Master

Built at

Glasgow

By whom built

Jas Bonnell & Co (S/SN 406)

When built

1926

Engines made at

Glasgow

By whom made

D. Rowan & Co Ltd (N° 836)

when made

1926

Boilers made at

Glasgow

By whom made

D. Rowan & Co Ltd (N° 836)

when made

1926

Registered Horse Power

Owners T & J. Harrison Ltd

Port belonging to

Liverpool

Nom. Horse Power as per Section 28

464

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

26"-43"-73"

Length of Stroke

48"

Revs. per minute

77

Dia. of Screw shaft

14.85

Material of

I. steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

yes

No O.G.

Is the after end of the liner made water tight

in the propeller boss

yes

If the liner is in more than one length are the joints burned

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

Length of stern bush

5'-10"

Dia. of Tunnel shaft

as per rule 13.5

Dia. of Crank shaft journals

as per rule 4.206

Dia. of Crank pin

14.5"

Size of Crank webs

9" x 22.5"

Dia. of thrust shaft under

collars

14.5"

Dia. of screw

17'-6"

Pitch of Screw

16'-6"

No. of Blades

4

State whether moveable

yes

Total surface

940 sq. ft.

No. of Feed pumps

2

Diameter of ditto

4"

Stroke

24"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

4.5"

Stroke

24"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

3

SIZES OF PUMPS

10.9 x 12.9

8.6 x 9.7

10.9 x 12.9

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

4 @ 3.5"

In Holds, &c.

N° 1 hold - 2 @ 3.5"

N° 2 hold - 2 @ 3.5"

N° 3 hold - 2 @ 3.5"

N° 4 hold - 2 @ 3.5"

N° 5 hold - 2 @ 3.5"

N° 6 hold - 1 @ 3.5"

No. of Bilge Injections

1

SIZES

8"

Connected to condenser, or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

yes

4.5"

Are all the bilge suction pipes fitted with

yes

Are the roses in Engine room always accessible

yes

Are the sluices on Engine room bulkheads always accessible

none

Are all connections with the sea direct on the skin of the ship

yes

Are they 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 Discharge Pipes 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 are carried through the bunkers

none

How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

yes

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

Upper deck

(Pleas)

(Bars)

BOILERS, &c.—(Letter for record)

(1)

Manufacturers of Steel

David White & Son Ltd.

Lanarkshire Steel Co. Ltd.

208

Total Heating Surface of Boilers

4706 sq. ft.

Is Forced Draft fitted

no

No. and Description of Boilers

Two double ended

Working Pressure

200

Tested by hydraulic pressure to

350

Date of test

14-4-26

No. of Certificate

14098

Can each boiler be worked separately

yes

Area of fire grate in each boiler

1050 sq. ft.

No. and Description of Safety Valves to

each boiler

2 direct spring

Area of each valve

12.5 sq. in.

Smallest distance between boilers or uptakes and bunkers or woodwork

1'-6"

Mean dia. of boilers

15'-2.25"

Length

16'-6"

Material of shell plates

steel

Thickness

1.25"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

yes

long. seams

DBS. TR

Diameter of rivet holes in long. seams

1.75"

Pitch of rivets

9.15"

Lap of plates or width of butt straps

21.4"

Per centages of strength of longitudinal joint

rivets 92.6

plate 85.3

Working pressure of shell by rules

200

Size of manhole in shell

19.5" x 15.5"

Size of compensating ring

36.5" x 32.5" x 1.75"

No. and Description of Furnaces in each boiler

6 Morrison

Material

steel

Outside diameter

3'-7.16"

Length of plain part

top 1.9"

Thickness of plates

bottom 1.32"

Description of longitudinal joint

welded

No. of strengthening rings

—

Working pressure of furnace by the rules

200

Combustion chamber plates

Material

steel

Thickness: Sides

3.32"

Back

Top

3.32"

Bottom

3.32"

Pitch of stays to ditto: Sides

10.8" x 8.7"

Back

Top

10.8" x 8.7"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

200

Material of stays

Iron

Area at smallest part

2.030"

Area supported by each stay

89.40"

Working pressure by rules

202

End plates in steam space:

Material

Steel

Thickness

1.3"

Pitch of stays

22" x 20"

How are stays secured

B.N.

Working pressure by rules

200

Material of stays

steel

Area at smallest part

8.6758"

Area supported by each stay

385.0"

Working pressure by rules

201

Material of Front plates at bottom

steel

Thickness

1"

Material of Lower back plate

—

Thickness

—

Greatest pitch of stays

—

Working pressure of plate by rules

—

Diameter of tubes

3.5"

Pitch of tubes

4.13" x 4.5"

Material of tube plates

steel

Thickness: Front

1"

Back

7/8"

Mean pitch of stays

11 3/4"

Pitch across wide water spaces

14.98"

Working pressures by rules

F230. B200

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

20" x 10.34" x 7/8"

Length as per rule

3'-6 1/4"

Distance apart

8 7/8"

Working pressure by rules

200

Steam dome: description of joint to shell

none

% of strength of joint

—

Diameter

—

Thickness of shell plates

—

Material

—

Description of longitudinal joint

—

Diam. of rivet holes

—

Pitch of rivets

—

Working pressure of shell by rules

—

Crown plates

—

Thickness

—

How stayed

—

SUPERHEATER.

Type

Smoke tube

Date of Approval of Plan

IS A DONKEY BOILER FITTED? *yes*If so, is a report now forwarded? *yes*

SPARE GEAR. State the articles supplied:—In accordance with the Rules, and in addition:—

one propeller shaft, one propeller boss, 2 propeller blades, one Thompson coupling, two pairs of top end bushes, one pair of bottom end bushes, one air pump rod, one circulating pump impeller and shaft, one set of air pump valves, one air pump head valve seating, one eccentric sheave and strap, one valve spindle.

The foregoing is a correct description,

for David Rowan & Co. Ltd.

Archd. W. Grierson,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 1926 Jan 29 Feb 2-4-9-10-22-23-24-25 Mar 4-8-11-15-16-25-29 Apr 4-8-14-12-9-19-16-21-26-27-28
 { During erection on board vessel -- } 30 May 3-4-5-6-7-10-17-18-19-20-21-24-25-26-28-31 June 4-7-8-10-11-15-16-17-21-23-25 July 1 Aug 27-31
 Total No. of visits 58

Is the approved plan of main boiler forwarded herewith *yes*" " " donkey " " " *yes*

Dates of Examination of principal parts—Cylinders 25-3-26 Slides 21-5-26 Covers 19-5-26 Pistons 26-5-26 Rods 19-5-26

Connecting rods 11-3-26 Crank shaft 19-4-26 Thrust shaft 17-5-26 Tunnel shafts 21-4-26 Screw shaft 21-4-26 Propeller 8-4-26

Stern tube 19-4-26 Steam pipes tested 14-4-26 17-6-26 Engine and boiler seatings 26-5-26 Engines holding down bolts 23-6-26

Completion of pumping arrangements 1-7-26 Boilers fixed 21-6-26 Engines tried under steam 31-8-26

Completion of fitting sea connections 18-5-26 Stern tube 18-5-26 Screw shaft and propeller 18-5-26

Main boiler safety valves adjusted 25-6-26 Thickness of adjusting washers all 3/8"

Material of Crank shaft J. Steel Identification Mark on Do. LLOYD'S NO 7381 19-4-26 Material of Thrust shaft J. Steel Identification Mark on Do. LLOYD'S NO 7381 17-5-26

Material of Tunnel shafts J. Steel Identification Marks on Do. LLOYD'S NO 7381 21-4-26 Material of Screw shafts J. Steel Identification Marks on Do. LLOYD'S NO 7381 21-4-26

Material of Steam Pipes Lapwelded wrought iron Test pressure 600 lbs per sq. in.

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 Section 49 of the Rules been complied with *✓*Is this machinery duplicate of a previous case *yes* If so, state name of vessel "Wayfarer".

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

The workmanship and materials are good

The machinery has been constructed under special survey, satisfactorily fitted in the vessel, tried under steam and found good.

It is eligible in my opinion for Classification and the record ~~11-5-26~~ +LMC 8, 26

It is submitted that
 this vessel is eligible for
 THE RECORD. +LMC 8. 26. CL.

The amount of Entry Fee ... £ 5 :

Special ... £ 94:12 :

Donkey Boiler Fee ... £ :

Travelling Expenses (if any) £ :

When applied for,

3/9/26.

When received,

7-9-26.

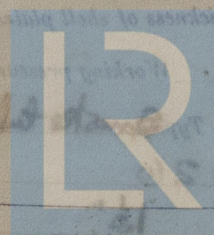
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 7-SEP 1926

Assigned +L.M.C.

CERTIFICATE WRITTEN

8, 26.



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Lloyd's Register Foundation

Date of writing

No. in Sur Reg. Book.

Master

Engines made

Boilers made

Nominal Horse

MULTITU

Manufacture

Total Heating

No. and Des

Tested by hy

Area of Fire

Area of each

In case of do

Smallest dist

Smallest dist

Largest inter

Thickness

long, seams

Percentage o

Percentage o

Thickness of

Material s

Length of p

Dimensions

End plates

How are sta

Tube plates

Mean pitch

Girders to c

at centre 2

in each

Tensile stre

Pitch of stay

Working pr

Thickness

Pitch of sta

Working Pr

Diameter {

Working pr

Diameter {