

Rpt. 4.

REPORT ON MACHINERY.

No. 74885

Date of writing Report 11 October 1921

When handed in at Local Office

11.10.1921 Port of

Received at London Office THE 25 OCT. 1921

No. in Survey held at
Reg. Book.

North Shields

Date, First Survey Oct 13 1920

Last Survey 5 October 1921

36736 on the

S.S. "Channel Queen"

(Number of Visits 13)

Master

Built at South Shields

By whom built Messrs Remondson & Co

(No 195) Tons
When built

Engines made at

Southampton

By whom made Messrs Lang. Summers & Co Ltd

when made 1920.

Boilers made at

Stockton

By whom made Messrs Riley Bros Ltd

(No 365)

when made 1921.

Registered Horse Power

Owners London & Channel Island SS Co Ltd

Port belonging to London

Nom. Horse Power as per Section 28

102.

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

No.

ENGINES, &c.—Description of Engines See Southampton Report No 10638 No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 13 1/4" - 22" - 37" Length of Stroke 27 Revs. per minute 115 Dia. of Screw shaft as per rule as fitted Material of screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight in the propeller boss 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 If two liners are fitted, is the shaft lapped or protected between the liners Length of stern bush

Dia. of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under collars

Dia. of screw Pitch of Screw No. of Blades State whether movable Total surface

No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Donkey Engines 2 Sizes of Pumps 1 Red 6" x 6" x 4" 1 Blue 6" x 7" x 8" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2 - 2 1/4" In Holds, &c. 2 - 2" (P+S)

No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump pump. Is a separate Donkey Suction fitted in Engine room & size Yes. 2 1/2"

Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible

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 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 are carried through the bunkers Bilge suction to stokehold How are they protected hood casings.

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 None. Is it fitted with a watertight door worked from

OILERS, &c.—(Letter for record) Manufacturers of Steel See Middlesbrough Report No 10939.

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate

Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to

each boiler Double Spring Area of each valve 3.97 sq ft Pressure to which they are adjusted 185 lb. Are they fitted with easing gear Yes.

Smallest distance between boiler uptakes and bunkers 4'-0" Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

Long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

Thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Steam dome: description of joint to shell % 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 Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

002165-002173-0143

Lloyd's Register
Foundation

IS A DONKEY BOILER FITTED?

No.

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:-

See Southampton Report No 10638.

Set of coupling belts. and a quantity of iron, bolts & nuts of various sizes have been supplied.

The foregoing is a correct description.

OF THE SHIELDS ENGINEERING & DRY DOCK CO., LIMITED.

J. L. Turnbull.

ENGINE WORKS Manufacturer.
MANAGER

Dates of Survey while building { During progress of work in shops - - } 1920 Oct. 13. 1921 Jul 26 Aug 3. 15. 19 Sep 13. 15. 21. 22. 27 Oct 3. 4. 5.
{ During erection on board vessel - - - }
Total No. of visits 13

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller
Stern tube Steam pipes tested 13-9-21 } Engine and boiler seatings 3-8-21. Engines holding down bolts 15-9-21.
Completion of pumping arrangements 27-9-21. Boilers fixed 22-9-21. Engines tried under steam 22-9-21.
Completion of fitting sea connections 3-8-21. Stern tube 3-8-21. Screw shaft and propeller 3-8-21.
Main boiler safety valves adjusted 22-9-21. Thickness of adjusting washers Port 13 1/2" Starboard 9 1/2" Starboard 13 1/2" Starboard 9 1/2"
Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.
Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.
Material of Steam Pipes Copper. Test pressure 360 lbs.
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 If so, state name of vessel

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

The boilers & machinery of this vessel have been built under special survey and efficiently installed in the vessel at this port. The bulk as shown in approved sketch has been efficiently fitted in stern. The machinery has been tried under working conditions, and main boiler safety valves adjusted under steam.

This vessel is in my opinion eligible to have the record of 7 LMC 10-21 in the Register Book.

The amount of Entry Fee ... £ 3-0-0 When applied for,
Special ... £ 4-17-0 1st 10. 1921.
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) £ : : 26-11-1921

Committee's Minute

Assigned

MACHINERY CERT.

WRITTEN

+ LMC 10-21
28/2/22 C. L.J. McNeillan.
Engineer Surveyor to Lloyd's Register of Shipping.

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Lloyd's Register
Foundation

Date of writing Report
No. in Survey Reg. Book.
on the
Master
Engines made at
Boilers made at
Registered Horse
Nom. Horse Power
ENGINES, &
Dia. of Cylinders
Is the screw shaft
in the propeller
between the bearing
liners are fitted, i
Dia. of Tunnel shaft
collars 7 1/4"
No. of Feed pumps
No. of Bilge pumps
No. of Donkey Eng
In Engine Room
No. of Bilge Injection
Are all the bilge suction
Are all connections
Are they fixed sufficient
Are they each fitted with
What pipes are carried
Are all Pipes, Cock
Are the Bilge Suction
Is the Screw Shaft
OILERS, &c.
Total Heating Surface
Working Pressure
Can each boiler be used
each boiler
Smallest distance between
Thickness
long. seams
Per centages of strength
Size of compensating
Length of plain part
Working pressure of fire
Pitch of stays to ditto
Material of stays
Material
Area at smallest part
Thickness
Diameter of tubes
Pitch across wide
Thickness of girder at
Working pressure by
Diameter
Pitch of rivets
PERHEATEL
Date of Test
Diameter of Safety Valve