

## REPORT ON MACHINERY.

No. 47430

Port of *Newcastle-on-Tyne*No. in Survey held at  
Reg. Book.*South Shields*

Date, first Survey

*July 16 '03*

Last Survey

*5<sup>th</sup> August 1904*

on the

*S. S. QUEENWOOD*(Number of Visits *46*)

Master

Built at

*Rotterdam*

By whom built

*G. Vrijk*Tons  
Gross  
NetWhen built *1904*

Engines made at

*South Shields*

By whom made

*G. J. Grey*when made *1904*

Boilers made at

*South Shields*

By whom made

*Messrs J. S. Eltringham & Co*when made *1904*

Registered Horse Power

*133*

Owners

Port belonging to

Nom. Horse Power as per Section 28

*132.8*

Is Refrigerating Machinery fitted

*No*

Is Electric Light fitted

*No*

## ENGINES, &amp;c.—Description of Engines

*Tri-Compound*

No. of Cylinders

*3*

No. of Cranks

*3*

Dia. of Cylinders

*17-20 1/2-46*

Length of Stroke

*30"*

Revs. per minute

*80*

Dia. of Screw shaft

*7 1/2"*

Material of screw shaft

*Cast Iron*

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

*No*

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*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

*Painted*

Length of stern bush

*3'-4"*

Dia. of Tunnel shaft

*8.41"*

Dia. of Crank shaft journals

*8.23"*

Dia. of Crank pin

*8 7/8"*

Size of Crank webs

*5 1/2 x 12 1/2"*

Dia. of thrust shaft under

collars

*8 7/8"*

Dia. of screw

*11.9"*

Pitch of screw

*14"*

No. of blades

*4*

State whether moveable

*No*

Total surface

*45 sq ft*

No. of Feed pumps

*2*

Diameter of ditto

*2 3/4"*

Stroke

*16"*

Can one be overhauled while the other is at work

*Yes*

No. of Bilge pumps

*2*

Diameter of ditto

*3 1/4"*

Stroke

*16"*

Can one be overhauled while the other is at work

*Yes*

No. of Donkey Engines

*2*

Sizes of Pumps

*6 x 8 1/2 x 6**6 x 4 x 6**Duplex*

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

*3*

In Engine Room

*Three of 2 1/2" diam.*

In Holds, &amp;c.

*Aft hold Two of 2 1/2" Aft well*

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 &amp; 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

*No sluices*

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

*Gal. iron Wash deck pipe under upper deck*

How are they protected

*Not 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*

When were stern tube, propeller, screw shaft, and all connections examined in dry dock

*Nov/Dec*

Is the screw shaft tunnel watertight

*Yes*

Is it fitted with a watertight door

*Yes*worked from *Engine room platform*

## BOILERS, &amp;c.—

(Letter for record *L*)

Total Heating Surface of Boilers

*2152 sq ft*

Is forced draft fitted

*No*

No. and Description of Boilers

*One Single ended multitubular*

Working Pressure

*180 lbs*

Tested by hydraulic pressure to

*360 lbs*

Date of test

*6.6.04*

Can each boiler be worked separately

*Yes*

Area of fire grate in each boiler

*51.5 sq ft*

No. and Description of safety valves to

each boiler

*Two Spring loaded*

Area of each valve

*5.94*

Pressure to which they are adjusted

*185 lbs*

Are they fitted with easing gear

*Yes*

Smallest distance between boilers or uptakes and bunkers or woodwork

*21"*

Mean dia. of boilers

*15'-0"*

Length

*10'-6"*

Material of shell plates

*Steel*

Thickness

*1 3/32"*

Range of tensile strength

*28/32*

Are they welded or flanged

*No*

Descrip. of riveting: cir. seams

*D. R. Lap*

long. seams

*D. B. J. R.*

Diameter of rivet holes in long. seams

*1 5/16"*

Pitch of rivets

*7 1/2"*

Lap of plates or width of butt straps

*18 3/8"*

Per centages of strength of longitudinal joint

*83.5*

Working pressure of shell by rules

*184 lbs*

Size of manhole in shell

*16 x 12*

Size of compensating ring

*7 1/2" x 1 3/32"*

No. and Description of Furnaces in each boiler

*3 Plain*

Material

*Steel*

Outside diameter

*43"*

Length of plain part

*7 1/2"*

Thickness of plates

*1 3/32"*

Description of longitudinal joint

*D. Butt Strap*

No. of strengthening rings

*One T bar*

Working pressure of furnace by the rules

*180*

Combustion chamber plates: Material

*Steel*

Thickness: Sides

*11/16"*

Back

*3/32"*

Top

*1/16"*

Bottom

*49/64"*

Pitch of stays to ditto: Sides

*10 x 9*

Back

*9 1/2 x 8*

Top

*9 1/2 x 8 1/2*

If stays are fitted with nuts or riveted heads

*Nuts*

Working pressure by rules

*180*

Material of stays

*S*

Diameter at smallest part

*1 1/32"*

Area supported by each stay

*10 x 9*

Working pressure by rules

*198*

End plates in steam space:

*S*

Material

*S*

Thickness

*1 5/8" + 5/8"*

Pitch of stays

*19 3/4 x 19 1/2"*

How are stays secured

*S. H. W.*

Working pressure by rules

*192*

Material of stays

*S*

Diameter at smallest part

*3 3/32"*

Area supported by each stay

*3850"*

Working pressure by rules

*187*

Material of Front plates at bottom

*S*

Thickness

*1"*

Material of Lower back plate

*S*

Thickness

*3 1/2"*

Greatest pitch of stays

*15 1/4 x 8"*

Working pressure of plate by rules

*208*

Diameter of tubes

*3 1/2"*

Pitch of tubes

*4 3/4 x 4 3/4"*

Material of tube plates

*S*

Thickness: Front

*1"*

Back

*3/8"*

Mean pitch of stays

*14 1/2 x 9 1/2"*

Pitch across wide water spaces

*14 1/2"*

Working pressures by rules

*182*

Girders to Chamber tops: Material

*S*

Depth and

*2, 8 1/2"*

Number and pitch of Stays in each

*2, 8 1/2"*

Working pressure by rules

*192*

Superheater or Steam chest; how connected to boiler

*None*

Can the superheater be shut off and the boiler worked

*Yes*

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules



**DONKEY BOILER—** No. \_\_\_\_\_ Description \_\_\_\_\_

Made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_ Where fixed \_\_\_\_\_

Working pressure \_\_\_\_\_ tested by hydraulic pressure to \_\_\_\_\_ No. of Certificate \_\_\_\_\_ Fire grate area \_\_\_\_\_ Description of safety valves \_\_\_\_\_

No. of safety valves \_\_\_\_\_ Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ If fitted with casing gear \_\_\_\_\_ If steam from main boilers can enter the donkey boiler \_\_\_\_\_

Dia. of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_

Descrip. of riveting long. seams \_\_\_\_\_ Dia. of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_

Lap of plating \_\_\_\_\_ Per centage of strength of joint \_\_\_\_\_ Rivets \_\_\_\_\_ Thickness of shell crown plates \_\_\_\_\_ Radius of do. \_\_\_\_\_ No. of Stays to do. \_\_\_\_\_

Dia. of stays \_\_\_\_\_ Diameter of furnace Top \_\_\_\_\_ Bottom \_\_\_\_\_ Length of furnace \_\_\_\_\_ Thickness of furnace plates \_\_\_\_\_ Description of joint \_\_\_\_\_

Thickness of furnace crown plates \_\_\_\_\_ Stayed by \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_

Working pressure of furnace by rules \_\_\_\_\_ Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_ Thickness of water tubes \_\_\_\_\_

**SPARE GEAR.** State the articles supplied:— 2 Top end, 2 bottom end, 2 main bearing bolts & nuts, 1 set coupling bolts, 1 set Air, circ. & fuel pump valves, H.P. & P. piston springs, 1 propeller, iron & bolts assorted

G. H. Grey. Manufacturer of Machinery

The foregoing is a correct description,

Jos. D. Ellingham & Co. Manufacturers of main boiler.

Dates of Survey while building { During progress of work in shops - 1904. 13th July, 16th Aug., 18th Nov., 30th Oct., 5th Nov., 20th Dec., 27th Nov., 5th Dec., 26th Dec., 4th Jan., 15th Feb., 24th Feb., 1st Mar., 10th Apr., 15th May, 1904. 18th Eng. 10th Nov., 18th Dec., 10th Jan., 3rd Feb., 10th Mar., 16th Apr., 29th May, 1904. 15th June, 27th July, 4th Aug., 1904. Total No. of s 46

Is the approved plan of main boiler forwarded herewith Yes.

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

The main boiler has been constructed under special survey. The material & workmanship good, & tested in accordance with the rules of the Society

The machinery of this vessel has been built under special survey & in my opinion is eligible for record L.M.C.S.O.

N.B. The Donkey Boiler has been made, fitted & Safety Valves adjusted at Rotterdam the reports not being to hand & the certificates are urgently required

It is submitted that this vessel is eligible for THE RECORD. L.M.C.S.O.

J.S.P.

11.8.04

The amount of Entry Fee. £ 2 : : : When applied for, 9 AUG 1904  
Special £ 19 : 16 : : :  
Donkey Boiler Fee £ : : : : :  
Travelling Expenses (if any) £ : : : : : When received, 11.8.04

Committee's Minute

FRI. 12 AUG 1904

Assigned

+ L.M.C.S.O.

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



© 2020

Lloyd's Register Foundation

Newcastle-on-Tyne.

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

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