

No. 11972.
11937

REPORT ON MACHINERY.

Port of *Greenock.*

WED, 2 MAR 1898

Received at London Office 18

Survey held at *Port Glasgow.*

Date, first Survey *18th Decr 1897* Last Survey *25th January* 1898

(Number of Visits *13*.)

on the *Screw Steamer "Craigrowan."*

Tons ^{Gross}
_{Net}

When built *1898.*

Built at *Port Glasgow* By whom built *Rodger & Co.*

By whom made *Hall Brown, Buttery & Co.* when made *1898.*

By whom made when made

Horse Power

Owners

Port belonging to *Leith*

Horse Power as per Section 28

Is Electric Light fitted

VES, &c.—Description of Engines

No. of Cylinders

No. of Cranks

er of Cylinders

Length of Stroke

Revolutions per minute

Diameter of Screw shaft ^{as per rule}
_{as fitted}

r of Tunnel shaft ^{as per rule}
_{as fitted}

Diameter of Crank shaft journals

Diameter of Crank pin

Size of Crank webs

of screw

Pitch of screw

No. of blades

State whether moveable

Total surface

Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

Donkey Engines

Sizes of Pumps

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

ne Room

In Holds, &c.

ge injections

sizes

Connected to condenser, or to circulating pump

Is a separate donkey suction fitted in Engine room & size

he bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

connections with the sea direct on the skin of the ship *yes*

Are they Valves or Cocks *Both.*

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

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*

pes are carried through the bunkers

How are they protected

pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times

bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges

re stern tube, propeller, screw shaft, and all connections examined in dry dock *on ship before launching.* Is the screw shaft tunnel watertight

ed with a watertight door

worked from

RS, &c.—

(Letter for record)

Total Heating Surface of Boilers

Is forced draft fitted

Description of Boilers

Working Pressure

Tested by hydraulic pressure to

test Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of safety valves to

er Area of each valve

Pressure to which they are adjusted

Are they fitted

ng gear Smallest distance between boilers or uptakes and bunkers or woodwork

Mean diameter of boilers

Material of shell plates

Thickness

Description of riveting: circum. seams

long. seams

of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

ges of strength of longitudinal joint

^{rivets}
_{plate}

Working pressure of shell by rules

Size of manhole in shell

mpensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

plain part

^{top}
_{bottom}

Thickness of plates

^{crown}
_{bottom}

Description of longitudinal joint

No. of strengthening rings

pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

cross wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

of girder at centre

Length as per rule

Distance apart

Number and pitch of Stays in each

pressure by rules

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

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

d with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

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GRK 340-0093

DONKEY BOILER— Description

Made at _____ By whom made _____ When made _____ Where fitted _____
 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 easing gear _____ If steam fitted _____
 enter the donkey boiler _____ Diameter of donkey boiler _____ Length _____ Material of shell plates _____
 Description of riveting long. seams _____ Diameter of rivet holes _____ Whether punched or drilled _____
 Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays _____
 Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____
 joint _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of furnace _____
 Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tank _____

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

Dates of Survey { During progress of work in shops - - 1897/ December 18. 20. 23. 27. 29. 31. 1898. Jan'y 8. 11. 12. 17. 21. 24. 25.
 while building { During erection on board vessel - -
 Total No. of visits 13.

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

Examined Stern frame boss bored. Stern tube for place. Screw shaft shipped. Propeller securely fastened on sea connections fitted on vessel's plating.

The above mentioned parts of machinery are now in place and the vessel has been towed to Glasgow to get engine fitted on board.

The amount of Entry Fee. £ : : When applied for,
 Special £ : :18.....
 Donkey Boiler Fee £ : : When received,
 Travelling Expenses (if any) £ : :18.....

Committee's Minute

TUES. 8 MAR 1898

Assigned

A. B. Heron

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



Lloyd's Register Foundation