

REPORT ON MACHINERY.

Port of Glasgow

Received at London Office 18

No. in Survey held at Supplementary Report Date, first Survey

Last Survey 18

Reg. Book. on the donkey hailer "S.S. Pisa"

(Number of Visits)

Tons } Gross
Net

Master Built at By whom built

When built

Engines made at By whom made when made

Boilers made at Glasgow By whom made A. Stephen & Son when made 1896

Registered Horse Power Owners Port belonging to

Nom. Horse Power as per Section 28 Is Electric Light fitted

ENGINES, &c.—Description of Engines

| Description of Engines | | | | No. of Cylinders | No. of Cranks |
|---|---|---|--|------------------|---------------|
| Diameter of Cylinders | Length of Stroke | Revolutions per minute | Diameter of Screw shaft | as per rule | as fitted |
| Diameter of Tunnel shaft | Diameter of Crank shaft journals | Diameter of Crank pin | Size of Crank webs | | |
| Diameter of screw | Pitch of screw | No. of blades | State whether moveable | 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 | Sizes of Pumps | No. and size of Suctions connected to both Bilge and Donkey pumps | | | |
| In Engine Room | In Holds, &c. | | | | |
| No. of bilge injections | sizes | Connected to condenser, or to circulating pump | Is a separate donkey suction fitted in Engine room & size | | |
| Are all the bilge suction pipes fitted with roses | Are the roses in Engine room always accessible | | Are the sluices on Engine room bulkheads always accessible | | |
| Are all connections with the sea direct on the skin of the ship | Are they Valves or Cocks | | | | |
| Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates | Are the discharge pipes above or below the deep water line | | | | |
| Are they each fitted with a discharge valve always accessible on the plating of the vessel | Are the blow off' cocks fitted with a spigot and brass covering plate | | | | |
| What pipes are carried through the bunkers | How are they protected | | | | |
| Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times | | | | | |
| Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges | | | | | |
| When were stern tube, propeller, screw shaft, and all connections examined in dry dock | | | Is the screw shaft tunnel watertight | | |
| Is it fitted with a watertight door | | | worked from | | |

BOILERS, &c.—

(Letter for record S.) Total Heating Surface of Boilers 993 sq ft Is forced draft fitted no

| | | | | | |
|--|--------------------------------------|--|----------------------------|--|---------------------------|
| No. and Description of Boilers | <u>one return tubular</u> | Working Pressure | <u>80 lbs</u> | Tested by hydraulic pressure to | <u>160 lbs</u> |
| Date of test | <u>26.11.96</u> | Can each boiler be worked separately | <u>yes</u> | Area of fire grate in each boiler | <u>32 sq ft</u> |
| each boiler | <u>two spring loaded</u> | Area of each valve | <u>8.95 sq in</u> | Pressure to which they are adjusted | <u>80 lbs</u> |
| with easing gear | <u>yes</u> | Smallest distance between boilers or uptakes and bunkers or woodwork | <u>in deckhouse</u> | Mean diameter of boilers | <u>132" inside</u> |
| Length | <u>9' 0 1/2"</u> | Material of shell plates | <u>Steel</u> | Thickness | <u>5/8"</u> |
| Diameter of rivet holes in long. seams | <u>7/8"</u> | Pitch of rivets | <u>4 1/8"</u> | Lap of plates or width of butt straps | <u>6 1/2"</u> |
| Per centages of strength of longitudinal joint | <u>79</u> | Working pressure of shell by rules | <u>88.5</u> | Size of manhole in shell | <u>12 x 16"</u> |
| Size of compensating ring | <u>McNeil</u> | No. and Description of Furnaces in each boiler | <u>2 plain taper</u> | Material | <u>Steel</u> |
| Length of plain part | <u>36 1/2"</u> | Thickness of plates | <u>3 1/32"</u> | Description of longitudinal joint | <u>Double Butt straps</u> |
| Working pressure of furnace by the rules | <u>108 lbs</u> | Combustion chamber plates: Material | <u>Steel</u> | Thickness: Sides | <u>7/16"</u> |
| Pitch of stays to ditto: Sides | <u>7 7/8"</u> | Back | <u>7 7/8"</u> | Top | <u>7/16"</u> |
| Material of stays | <u>Steel</u> | Diameter at smallest part | <u>1.80 sq in</u> | Area supported by each stay | <u>62 sq in</u> |
| Material | <u>Steel</u> | Thickness | <u>23/32"</u> | Pitch of stays | <u>15 1/4"</u> |
| Diameter at smallest part | <u>2.10 sq in</u> | Area supported by each stay | <u>232 sq in</u> | Working pressure by rules | <u>87.5 lbs</u> |
| Thickness | <u>1 1/16"</u> | Material of Lower back plate | <u>Steel</u> | Thickness | <u>5/8"</u> |
| Diameter of tubes | <u>3 1/4"</u> | Pitch of tubes | <u>4 1/8" & 4 3/8"</u> | Material of tube plates | <u>Steel</u> |
| Pitch across wide water spaces | <u>14 1/4"</u> | Working pressures by rules | <u>154 lbs</u> | Girders to Chamber tops: Material | <u>Steel</u> |
| thickness of girder at centre | <u>5" x 2 x 5/8"</u> | Length as per rule | <u>26 1/2"</u> | Distance apart | <u>7 1/2"</u> |
| Working pressure by rules | <u>84 lbs</u> | Superheater or Steam chest; how connected to boiler | <u>now</u> | Can the superheater be shut off and the boiler worked separately | |
| holes | 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 | End plates: Thickness | How stayed | |
| Working pressure of end plates | Area of safety valves to superheater | Are they fitted with easing gear | | | |

14892 g/s.

DONKEY BOILER— 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 easing gear _____ If steam from main boilers can enter the donkey boiler _____

Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____

Description of riveting long. seams _____ Diameter 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. _____

Plates _____

Dia. of stays. _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description 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 :—

The foregoing is a correct description,

Manufacturer.

Alex Stephen Horn.

Dates { During progress of }
 of Survey { work in shops - - }
 while { During erection on }
 building { board vessel - - }
 Total No. of visits

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

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

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

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

Committee's Minute

FRI 1 JAN 1897

Assigned



© 2019

Lloyd's Register Foundation