

REPORT ON MACHINERY.

Received from 3-AUG.1900

Port of Glasgow

TUES. SEP 18 1900

Survey held at Glasgow Date, first Survey 5 Decr '98 Last Survey 6 July 1900
Reg. Book. (Number of Visits 25)

Sup: on the screw steamer "Florida" Tons { Gross 3315- Net 2159-
Master G. Maccari Built at Port Glasgow By whom built Ruml & Co When built 1900

Engines made at Gurnox By whom made J. G. Keneaid & Co when made 1900
Boilers made at Glasgow By whom made Lindsay Burnell & Co when made 1900

Registered Horse Power Owners E. C. Law & Holmich & Coy. Port belonging to Luninpiccolo.
Nom. Horse Power as per Section 28 291 Is Refrigerating Machinery fitted no Is Electric Light fitted no.

ENGINES, &c.—Description of Engines No. of Cylinders No. of Cranks
Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule as fitted Lgth. 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 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 4400 sq ft Is forced draft fitted no
No. and Description of Boilers two single ended return tubes Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs

Date of test 29/6/00 Can each boiler be worked separately yes Area of fire grate in each boiler 63 sq ft No. and Description of safety valves to
each boiler two direct spring Area of each valve 7.06 sq ft Pressure to which they are adjusted 184 lbs Are they fitted with easing gear yes
Smallest distance between boilers or uptakes and bunkers or woodwork 12 1/2. Mean dia. of boilers 15-3 Length 10.6 Material of shell plates steel
Thickness 1/4 Range of tensile strength 28-32 Are they welded or flanged no Descrip. of riveting: cir. seams double lap long. seams butt
Diameter of rivet holes in long. seams 1 5/16 Pitch of rivets 9" Lap of plates on width of butt straps 19 1/2
Percentages of strength of longitudinal joint rivets 89.2 Working pressure of shell by rules 183 Size of manhole in shell 16 x 12
plate 86.4

Size of compensating ring 7m nuts No. and Description of Furnaces in each boiler 3 Doughtons Material steel Outside diameter 49"
Length of plain part top 19" Thickness of plates crown 19" Description of longitudinal joint welded No. of strengthening rings 4
bottom 32 bottom 32
Working pressure of furnace by the rules 192 lbs Combustion chamber plates: Material steel Thickness: Sides 7/8 Back 5/8 Top 3/2 5/8 Bottom 4/6

Pitch of stays to ditto: Sides 8 1/2 x 5 1/2 Back 8 1/2 x 8 1/2 Top 8 1/2 x 9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 195 lbs
Material of stays steel Diameter at smallest part 1 1/4 Area supported by each stay 70 sq in Working pressure by rules 185 lbs End plates in steam space:
Material steel Thickness 3/16 Pitch of stays 18 1/2 x 20 1/2 How are stays secured 27 nuts Working pressure by rules 183 lbs Material of stays steel
at smallest part 6 9/16 Area supported by each stay 662 sq in Working pressure by rules 192 lbs Material of Front plates at bottom steel
Thickness 3/4 Material of Lower back plate steel Thickness 3/4 Greatest pitch of stays 13 1/2 Working pressure of plate by rules 277 lbs

Diameter of tubes 3 1/2 Pitch of tubes 14 1/2 x 14 1/2 Material of tube plates steel Thickness: Front 1/2 Back 3/4 Mean pitch of stays 9"
Pitch across wide water spaces 14 1/2 Working pressures by rules 292 & 215 lbs Girders to Chamber tops: Material steel Depth and
thickness of girder at centre 8 x 3/4 double Length as per rule 27 3/8 Distance apart 29 3/8 Number and pitch of Stays in each two 8 1/2
Working pressure by rules 207 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked
separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
stiffened with rings Distance between rings Working pressure by rules End plate: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

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 easing 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:—

The foregoing is a correct description,
Lindsay Currie & Co. Manufacturers of Main Boilers

Dates of Survey while building

During progress of work in shops - - 1898: Dec. 5. 9. Jan. 19. Feb. 23. May. 10. Jun. 5. 9. 21. Aug. 21. Sep. 18. 19. Oct. 2. 9. 13. 28.

During erection on board vessel - - 1900: Jan. 9. Feb. 2. 21. Mar. 16. 20. June. 18. 28. July. 6.

Total No. of visits 25.

Is the approved plan of main boiler forwarded herewith *Yes*

.. .. donkey *No*

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

These boilers have been constructed under special survey, the materials and workmanship are of an of good description, they have now been forwarded to Dundee where they are to be fitted on board

[Faint handwritten notes and signatures, including 'A.M. Keane' and 'Glasgow']

The amount of Entry Fee.. £ : : When applied for.

Special £ 11 : 10 : 4 11.9. 1900.

Donkey Boiler Fee : : When received.

Travelling Expenses (if any) £ : : 11.9. 1900.

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

Committee's Minute **Glasgow.** 17 SEP. 1900

Assigned *See Gen. report no 12990.*

