

REPORT ON MACHINERY.

Port of Glasgow

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No. in Survey held at Supplementary Report Last Survey 18
Reg. Book. Supplementary Report (Number of Visits)

on the Donkey boiler. S.S. Okla

Master _____ Built at _____ By whom built _____ When built _____

Engines made at _____ By whom made _____ when made _____

Boilers made at Dumbarlon By whom made Denny & Co when made 1895

Registered Horse Power _____ Owners _____ Port belonging to _____

Nom. Horse Power as per Section 28 _____

ENGINES, &c. — Description of Engines _____ No. of Cylinders _____

Diameter of Cylinders _____ Length of Stroke _____ Revolutions per minute _____ Diameter of Screw shaft as per rule _____ as fitted _____

Diameter of Tunnel shaft as per rule _____ Diameter of Crank shaft journals _____ Diameter of Crank pin _____ Size of Crank webs _____ as fitted _____

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 780 sq ft

No. and Description of Boilers one Cylindrical Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs

Date of test 6.5.95 Can each boiler be worked separately Yes Area of fire grate in each boiler 30 sq ft No. and Description of safety valves to each boiler two opening loaded Area of each valve 7 sq in Pressure to which they are adjusted 80 lbs Are they fitted with easing gear Yes Smallest distance between boilers or uptakes and bunkers or woodwork Manchester Mean diameter of boilers 125 3/4"

Length 8' 6" Material of shell plates Steel Thickness 7/16" Description of riveting: circum. seams lap 2 Rivets long. seams Dr. Rivet 2 Rivets

Diameter of rivet holes in long. seams 13/16" Pitch of rivets 3 1/2" Lap of plates or width of butt straps 9"

Per centages of strength of longitudinal joint plate 76.7 Working pressure of shell by rules 85.5 lbs Size of manhole in shell 13 x 17"

Size of compensating ring 9/16 x 8 7/2 No. and Description of Furnaces in each boiler two plain Material Steel Outside diameter 37"

Length of plain part top 16.0" bottom _____ Thickness of plates crown 3/2" Description of longitudinal joint welded No. of strengthening rings none

Working pressure of furnace by the rules 10 lbs Combustion chamber plates: Material Steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 1/2"

Pitch of stays to ditto: Sides 9" Back 8 1/4 x 8 3/4 Top 8 1/4 x 9 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 95

Material of stays Steel Diameter at smallest part 96 Area supported by each stay 81 sq in Working pressure by rules 94 lbs End plates in steam space: Material Steel Thickness 1/16" Pitch of stays 16 1/2 x 16" How are stays secured Nuts & Washers Working pressure by rules 82 lbs Material of stays Steel

Diameter at smallest part 3 1/4 Area supported by each stay 26 1/4 sq in Working pressure by rules 105 lbs Material of Front plates at bottom Steel

Thickness 3/4" Material of Lower back plate Steel Thickness 9/16" Greatest pitch of stays 8 3/4" Working pressure of plate by rules 106 lbs

Diameter of tubes 3" Pitch of tubes 4 1/4" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 8 1/2"

Pitch across wide water spaces 15" Working pressures by rules 89 lbs Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 5 1/2 x 7 1/8" Length as per rule 24" Distance apart 8 1/4" Number and pitch of Stays in each 2 x 9"

Working pressure by rules 98 lbs Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately _____

holes _____ 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 _____ End plates: Thickness _____ How stayed _____

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

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