

Port of Nagasaki

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ENGINES, &c.—Description of Engines *Twin Screw Triple Exp. No. of Cylinders Six No. of Cranks Six*
 Diameter of Cylinders *20: 33½: 56* Length of Stroke *48* Revolutions per minute *85* Diameter of Screw shaft *as per rule 12.07*
 Diameter of Tunnel shaft *as per rule 10.9* Diameter of Crank shaft journals *12½* Diameter of Crank pin *12½* Size of Crank webs *8¼ x 19*
 Diameter of screw *15" 0"* Pitch of screw *17' 3" S 17' 0" P* No. of blades *4* State whether moveable *Yes* Total surface *68.8 each*
 No. of Feed pumps *4* Diameter of ditto *3¾* Stroke *24"* Can one be overhauled while the other is at work *Yes.*
 No. of Bilge pumps *4* Diameter of ditto *3¾* Stroke *24"* Can one be overhauled while the other is at work *Yes.*
 No. of Donkey Engines *Four* Sizes of Pumps *{ Ballast 9½ x 12 x 10* No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room *Four 3¾ dia.* *{ Weir Fed 10 x 8 x 24 Pipe.*
Small dupl. pump on Holds, &c. *Four 3½ Suctions to each of Nos. 1, 2, 3*
& 4 holds. 3½ suction to aft hold well. 3½ suction to tunnel well.
 No. of bilge injections *2* sizes *6¾* Connected to condenser, or to circulating pump *Yes* Is a separate donkey suction fitted in Engine room & size *Yes 3½*
 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 *None*
 Are all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Larger valves; smaller cocks;*
 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 *Below*
 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 *Forward bilge suction* How are they protected *Strong wooden casings*
 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 *✓* Is the screw shaft tunnel watertight *Yes*
 Is it fitted with a watertight door *Yes* worked from *Upper Eng. Rm. platform.*

OILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 10,000 sq ft Is forced draft fitted No.

No. and Description of Boilers Two double- & two single ended Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs

Date of test 19.9.01 Can each boiler be worked separately Yes Area of fire grate in each boiler 106 2/3 sq. ft.

each boiler 129.5.01 Area of each valve 0.275 sq. ft. Pressure to which they are adjusted 200 lbs Are they fitted with easing gear Yes Smallest distance between boilers or uptakes and bunkers or woodwork Several feet Mean diameter of boilers 13" 9"

Length 17' 0" Material of shell plates Steel Thickness 1 3/32 Description of riveting: circum. seams mid. double long. seams double straps

Diameter of rivet holes in long. seams 1 1/16 Pitch of rivets 9 7/8 outside row Lap of plates or width of butt straps 21 3/4 Are they fitted

Per centages of strength of longitudinal joint 89.1 Working pressure of shell by rules 220 lbs Size of manhole in shell 16" x 12"

Size of compensating ring 2' 10" x 2' 6" No. and Description of Furnaces in each boiler Six Morrison Material Steel Outside diameter 43 3/16

Length of plain part 1' 13/32 Thickness of plates 19/32 Description of longitudinal joint Welded No. of strengthening rings —

Working pressure of furnace by the rules 218 1/2 Combustion chamber plates: Material Steel Thickness: Sides 45/64 Back 39/64 Top 45/64 Bottom 7/8

Pitch of stays to ditto: Sides 9" Back 8 x 7 1/4" Top 9 3/8 x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 200 lbs

Material of stays Steel Diameter at smallest part 1 5/8 Area supported by each stay 75.62 Working pressure by rules 220 End plates in steam space:

Material Steel Thickness 1 23/64 Pitch of stays 18 3/4 x 7 1/2" How are stays secured Double nuts Working pressure by rules 249 Material of stays Steel

Diameter at smallest part 3" Area supported by each stay 300 Working pressure by rules 230 Material of Front plates at bottom Steel

Thickness 29/32 Material of Lower back plate Steel Thickness 1 1/16 Greatest pitch of stays As app^r Working pressure of plate by rules 200 lbs

Diameter of tubes 3 1/4" Pitch of tubes 4 1/16 x 4 3/8" Material of tube plates Steel Thickness: Front 1 1/16 Back 25/32 Mean pitch of stays 9 1/16"

Pitch across wide water spaces 1 1/4" Working pressures by rules 200 Girders to Chamber tops: Material Steel Depth and

Thickness of girder at centre 7' 2 1/2" x 1' 1" re. 10.6 Suspended: 3' 0" 10.6 Distance apart 9 1/8 Number and pitch of Stays in each 4 x 8" N.E.

Working pressure by rules 200 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked

separately Yes 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 —

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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