

REPORT ON MACHINERY. MUN. AUG 26 1901

Port of *Trieste* Received at London Office 18

No. in Survey held at *Trieste* Date, first Survey *19 July 1900* Last Survey *21 Aug 1901*

Reg. Book. on the *Iron Steamer Austria* (Number of Visits) Tons *Gross 2585 Net 4829*

Master *C. Tellner* Built at *Trieste* By whom built *Lloyd Arsenal* When built *1901.5*

Engines made at *Trieste* By whom made *Lloyd Arsenal* when made *1901.5*

Boilers made at *Wallsend* By whom made *Wallsend Shipways & Co* when made *1900*

Registered Horse Power *2585* Owners *Lloyd Austrians* Port belonging to *Trieste*

Nom. Hors. Power as per Section 28 *2585* Is Refrigerating Machinery fitted *Yes* Is Electric Light fitted *Yes*

ENGINES, &c.—Description of Engines *Triple expansion* No. of Cylinders *3* No. of Cranks *3*

Dia. of Cylinders *28", 42", 80"* Length of Stroke *54* Revs. per minute *80* Dia. of Screw shaft *16 1/2"* Lgth. of stern bush *66"*

Dia. of Tunnel shaft *18 1/2"* Dia. of Crank shaft journals *16 1/4"* Dia. of Crank pin *16 1/2"* Size of Crank webs *34x26* Dia. of thrust shaft under collar *15 7/8"* Dia. of screw *19 3/4"* Pitch of screw *19 3/4"* No. of blades *4* State whether *movable* *yes* Total surface *1040"*

No. of Feed pumps *2* Diameter of ditto *4"* Stroke *30"* Can one be overhauled while the other is at work *yes*

No. of Bilge pumps *2* Diameter of ditto *4 1/2"* Stroke *30"* Can one be overhauled while the other is at work *yes*

No. of Donkey Engines *8000* Sizes of Pumps *see remarks* No. and size of Suctions connected to both Bilge and Donkey pumps *11 suction to bilges of 4" dia. & 11 suction to bilges of 4" dia. & 11 suction to bilges of 4" dia. & 11 suction to bilges of 4" dia.*

Engine Room *2 suction of 4" diameter to ventilating fan in holds, &c. 11 suction to bilges of 4" dia. & 11 suction to bilges of 4" dia. & 11 suction to bilges of 4" dia. & 11 suction to bilges of 4" dia.*

No. of bilge injections *1* sizes *1 1/4"* Connected to condenser or to circulating pump *yes* Is a separate donkey suction fitted in Engine room of size *yes 5"*

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* *Valves only*

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 *above*

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*

That pipes are carried through the bunkers *none* How are they protected *fitted through plate brackets*

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*

Then were stern tube, propeller, screw shaft, and all connections examined in dry dock *yes* Is the screw shaft tunnel watertight *yes*

Is it fitted with a watertight door *yes* worked from *main platform*

BOILERS, &c.— (Letter for record) Total Heating Surface of Boilers *26900* Is forced draft fitted *yes*

No. and Description of Boilers *3 Single ended null* Working Pressure *200 lb* Tested by hydraulic pressure to *400 lb*

Date of test *21.1.00* Can each boiler be worked separately *yes* Area of fire grate in each boiler *59.16* No. and Description of safety valves to each boiler *2 Spring lever* Area of each valve *9.621* Pressure to which they are adjusted *205 lb* Are they fitted with easing gear *yes*

Smallest distance between boilers or uptakes and bulkheads or woodwork *3' 9"* No. and dia. of boilers *15' 6"* Length *12' 0"* Material of shell plates *Steel*

Thickness *1 1/2"* Range of tensile strength *29-32* Are they welded or flanged *no* Description of riveting: cir. seams *T.R. lap* long. seams *D.B.S. T.R.*

Diameter of rivet holes in long. seams *1 1/2"* Pitch of rivets *2 3/4"* Lap of plates *2 1/2"* width of butt straps *2 1/4"*

Percentages of strength of longitudinal joint *94.0* Working pressure of shell by rules *210 lb* Size of manhole in shell *16" x 12"*

No. of compensating ring *8 x 1 1/2"* No. and Description of Furnaces in each boiler *3 Deighton's* Material *Steel* Outside diameter *45 3/4"*

Length of plain part *5'* Thickness of plates *5"* Description of longitudinal joint *welded* No. of strengthening rings *two*

Working pressure of furnace by the rules *205 lb* Combustion chamber plates: Material *Steel* Thickness: Sides *7/8"* Back *7/8"* Top *5/8"* Bottom *5/8"*

Each of stays to ditto: Sides *8' 18"* Back *8' 18"* Top *8' 18"* Are stays fitted with nuts or riveted heads *Stays riveted* Working pressure by rules *221 lb*

Material of stays *Steel* Diameter at smallest part *1 1/2"* Area supported by each stay *61.9* Working pressure by rules *239 lb* End plates in steam space:

Material *Steel* Thickness *1 1/2"* Pitch of stays *16' x 15 1/2"* How are stays secured *DN+W* Working pressure by rules *200 lb* Material of stays *Steel*

Diameter at smallest part *2 1/2"* Area supported by each stay *248* Working pressure by rules *205 lb* Material of Front plates at bottom *Steel*

Thickness *1 1/2"* Material of Lower back plate *Steel* Thickness *5/8"* Greatest pitch of stays *13 1/2"* Working pressure of plate by rules *281 lb*

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

Thickness across wide water spaces *13 1/2"* Working pressures by rules *200 lb* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *9 1/2" x 3 1/2"* Length as per rule *34 5/8"* Distance apart *8"* Number and pitch of Stays in each *3-7 5/8"*

Working pressure by rules *209 lb* Superheater or Steam chest: how connected to boiler *none* Can the superheater be shut off and the boiler worked separately *yes*

Diameter *10"* Length *10"* Thickness of shell plates *5/8"* Material *Steel* Description of longitudinal joint *welded* Diam. of rivet *1 1/2"*

Pitch of rivets *2"* Working pressure of shell by rules *200 lb* Diameter of flue *10"* Material of flue plates *Steel* Thickness *5/8"*

Stiffened with rings *yes* Distance between rings *10"* Working pressure by rules *200 lb* End plates: Thickness *5/8"* How stayed *by stays*

Working pressure of end plates *200 lb* Area of safety valves to superheater *10"* Are they fitted with easing gear *yes*

WS62-0102



