

REPORT ON MACHINERY.

No. 2839
THU. JAN 25. 1912

Received at London Office

of writing Report 20.1.12 When handed in at Local Office Trieste to Port of Trieste
 in Survey held at Trieste Date, First Survey Oct 19th 1910 Last Survey 16th January 1912
 on the SS. HELOUAN (Arsenale N^o 126) (Number of Visits 27) Tons { Gross / Net }
 Master Martinovich Built at Trieste By whom built Lloyd's Arsenale When built 1912
 Engines made at Trieste By whom made Lloyd's Arsenale when made 1912
 Boilers made at Greenock Trieste By whom made Caird & Co & Lloyd's Arsenale when made 1911/2
 Registered Horse Power _____ Owners Lloyd Austriaco Port belonging to Trieste
 Nom. Horse Power as per Section 28 1580 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Stirn screw. Quadruple Exp. No. of Cylinders 4 No. of Cranks 4
 Dia. of Cylinders 27 1/2, 39, 56, 80 Length of Stroke 54 Revs. per minute 90 Dia. of Screw shaft as per rule 15 7/8 Material of screw shaft as fitted 16 7/8 Iron
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight
 the propeller boss Yes If the liner is in more than one length are the joints burned Yes If the liner does not fit tightly at the part
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes
 How are the bearings in the stern tube, is the shaft lapped or protected between the liners Yes Length of stern bush 5-4-2
 Dia. of Tunnel shaft as per rule 14 3/4 Dia. of Crank shaft journals as per rule 15 1/2 Dia. of Crank pin 16 1/4 Size of Crank webs 3 1/2 x 10 3/8 Dia. of thrust shaft under
 bars 16 1/4 Dia. of screw 17.3 Pitch of Screw 23.6 No. of Blades 3 State whether moveable _____ Total surface 92.5
 No. of Feed pumps 2 Diameter of ditto 9 1/2 x 12 1/4 Stroke 26 Can one be overhauled while the other is at work Yes see Smeeth. ltr 9.2.12
 No. of Bilge pumps 4 Diameter of ditto 8 x 8 Stroke 8 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps 7 x 5 x 12 No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 44 x 32 In Boiler Rooms 44 x 32 In Holds, &c. 2 in each hold 32 Tunnel well
 No. of Bilge Injections 2 sizes 10 Connected to condenser, or to circulating pump Cir. p. Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2
 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 Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valves & 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 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
 How are they protected _____
 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
 Dates of examination of completion of fitting of Sea Connections 24 July 1911 of Stern Tube 24 July 1911 Screw shaft and Propeller 24 July 1911
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Deck (Stonipatent)
BOILERS, &c.—(Letter for record) Manufacturers of Steel D. Colvellet Sons

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 Total Heating Surface of Boilers 24000 sq ft Is Forced Draft fitted Yes No. and Description of Boilers 8 Marine Single ended
 Working Pressure 215 lbs. Tested by hydraulic pressure to 430 lbs. Dates of test 10/10/11 & 18/10/11 Nos of Certificate 117 & 118
 Can each boiler be worked separately Yes Area of fire grate in each boiler 70 sq ft No. and Description of Safety Valves to
 each boiler Two Spring loaded Area of each valve 1180 Pressure to which they are adjusted 220 lbs. Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 2-3 Mean dia. of boilers 16-6 Length 11-7 1/2 Material of shell plates Steel
 Thickness 1 1/2 Range of tensile strength 30-34 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Lap SR
 Long. seams Double Strap Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 9 7/8 Lap of plates or width of butt straps 2 1/4
 Percentages of strength of longitudinal joint _____ Working pressure of shell by rules 222 lbs. Size of manhole in shell 16 x 12
 Size of compensating ring 8 x 12 No. and Description of Furnaces in each boiler 4 Deighton Material Steel Outside diameter 44 1/4
 Length of plain part 8-2 3/8 Thickness of plates crown 3 3/8 Description of longitudinal joint _____ No. of strengthening rings
 Working pressure of furnace by the rules 227 lbs. Combustion chamber plates: Material Steel Thickness: Sides 3/8 Back 2/32 Top 3/8 Bottom 1/8
 Pitch of stays to ditto: Sides 8 x 7 3/8 Back 8 x 8 Top 8 7/8 x 7 If stays are fitted with nuts or riveted heads Auto. Working pressure by rules 213 lbs.
 Material of stays Special Iron Diameter at smallest part 1 1/2 Area supported by each stay 65 sq in Working pressure by rules 215 lbs End plates in steam space:
 Material Steel Thickness 1 1/2 Pitch of stays 24 x 18 1/2 How are stays secured Double nut Working pressure by rules 232 lbs. Material of stays Steel
 Diameter at smallest part 2 1/2 Area supported by each stay 44 1/2 Working pressure by rules 231 lbs Material of Front plates at bottom Steel
 Thickness 3/32 Material of Lower back plate Steel Thickness 3/32 Greatest pitch of stays 13 1/4 Working pressure of plate by rules 26 lbs.
 Diameter of tubes 2 1/2 Pitch of tubes 3 3/4 x 3 3/4 Material of tube plates Steel Thickness: Front 1 1/2 + 3/32 Back 3/4 Mean pitch of stays 7 1/2
 Pitch across wide water spaces 13 1/2 Working pressures by rules 22 lbs. Back 27 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 10 x 13 1/4 Length as per rule 32 1/2 Distance apart 8 7/8 Number and pitch of stays in each 2-7
 Working pressure by rules 25 1/2 lbs Superheater or Steam chest; how connected to boiler _____ 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 _____
 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 _____

