

REPORT ON MACHINERY.

No. 11741

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Port of Hamburg

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No. in Survey held at Flensburg Date, first Survey 18th Nov 1909 Last Survey 18th Dec 1910
 Reg. Book. Steel & Co "Elmshorn" (Number of Visits 23)
 Master J. Bahr Built at Flensburg By whom built Flensburger Schiffbau Ges. Tons { Gross 4594
 Engines made at Flensburg By whom made Flensburger Schiffbau Ges. when made 1910 Net 3874
 Boilers made at Flensburg By whom made Flensburger Schiffbau Ges. when made 1910
 Registered Horse Power 594 Owners Deutsch Austral. Dampfschiff. Ges. Port belonging to Hamburg
 Nom. Horse Power as per Section 28 594 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 28 3/8, 47 1/4, 78" Length of Stroke 54" Revs. per minute 73 Dia. of Screw shaft as per rule 16 1/2" Material of screw shaft Steel
 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
 in the propeller boss yes If the liner is in more than one length are the joints burned no 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 no If two
 liners are fitted, is the shaft lapped or protected between the liners no Length of stern bush 5' 4.5"
 Dia. of Tunnel shaft as per rule 14 7/16" Dia. of Crank shaft journals as per rule 15 1/4" Dia. of Crank pin 15 1/32" Size of Crank webs 21 1/2 x 9" Dia. of thrust shaft under
 rollers 15 1/32" Dia. of screw 18 1/4" Pitch of Screw 17 1/6" No. of Blades 4 State whether moveable no Total surface 83 sq. ft.
 No. of Feed pumps 2 Diameter of ditto 4 1/8" Stroke 3 1/2" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 4 3/8" Stroke 3 1/2" Can one be overhauled while the other is at work yes
 No. of Donkey Engines 4 Sizes of Pumps see specification No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 6 5 off 3 1/2", 1 off 4", 1 Tunnel recess, 2 Tunnel in Holds, &c. 12 off 3 1/2", 1 from Tanks 12 off 10 1/2",
2 off 3 1/2"
 No. of Bilge Injections 1 sizes 7 1/2" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes, 4"
 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 no
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks valves and 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
 What pipes are carried through the bunkers none How are they protected no
 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 9/8.10. of Stern Tube 5/10.10 Screw shaft and Propeller 25/10.10.
 Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from byld. platform

MILLERS, &c.—(Letter for record S) Manufacturers of Steel Blochwalzwerk Ludw. Knaut & Co.
 Total Heating Surface of Boilers 8414 Is Forced Draft fitted yes No. and Description of Boilers 3 single ended multitubular
 Working Pressure 185 Tested by hydraulic pressure to 370 lbs Date of test 13/11/10 No. of Certificate 127, 128, 129
 Can each boiler be worked separately yes Area of fire grate in each boiler 65.96 sq. ft. No. and Description of Safety Valves to
 each boiler 2 Spring loaded Area of each valve 12.629" Pressure to which they are adjusted 125 lbs Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 18 3/4" Length 42' 0" Material of shell plates Steel
 Thickness 1.25" Range of tensile strength 455-50 lbs. Are the shell plates welded or flanged no Descrip. of riveting: cir. seams lap all riv
 long. seams dbl. butt, gap riv. Diameter of rivet holes in long. seams 1.5" Pitch of rivets 20.5" Lap of plates or width of butt straps 29.6" x 1.12"
 Percentages of strength of longitudinal joint rivets 88.70% Working pressure of shell by rules 195.1 lbs Size of manhole in shell 12.5 x 16.5"
 Size of compensating ring 8.7 x 1.2" No. and Description of Furnaces in each boiler 3 Morrison Material Steel Outside diameter 49.25"
 Length of plain part top 4" Thickness of plates bottom 3/16" Description of longitudinal joint welded No. of strengthening rings none
 Working pressure of furnace by the rules 209.8 Combustion chamber plates: Material Steel Thickness: Sides 62" Back 62" Top 62" Bottom 1 1/2"
 Pitch of stays to ditto: Sides 7.5 x 7.5" Back 7.5 x 7.5" Top 7.5 x 7.5" If stays are fitted with nuts or riveted heads both Working pressure by rules 220.9 lbs
 Material of stays Steel Diameter at smallest part 1.37" Area supported by each stay 59.29" Working pressure by rules 228.9 End plates in steam space:
 Material Steel Thickness 1" Pitch of stays 15" How are stays secured dbl. nuts & washers Working pressure by rules 250.7 lbs Material of stays Steel
 Diameter at smallest part 3" Area supported by each stay 225.29" Working pressure by rules 328.2 Material of Front plates at bottom Steel
 Thickness 1 1/2" Material of Lower back plate Steel Thickness 9" Greatest pitch of stays 14" Working pressure of plate by rules 226.8 lbs
 Diameter of tubes 2.75" Pitch of tubes 3.875 ins. Material of tube plates Steel Thickness: Front 1 1/2" Back 9" Mean pitch of stays 7.7"
 Pitch across wide water spaces 14" Working pressures by rules 215.6 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 9.8" x 1.3" Length as per rule 33" Distance apart 7.5" Number and pitch of stays in each 3-7.8"
 Working pressure by rules 215.6 lbs Superheater or Steam chest; how connected to boiler no Can the superheater be shut off and the boiler worked
 separately no Diameter no Length no Thickness of shell plates no Material no Description of longitudinal joint no Diam. of rivet
 holes no Pitch of rivets no Working pressure of shell by rules no Diameter of flue no Material of flue plates no Thickness no
 If stiffened with rings no Distance between rings no Working pressure by rules no End plates: Thickness no How stayed no
 Working pressure of end plates no Area of safety valves to superheater no Are they fitted with easing gear no

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