

REPORT ON MACHINERY.

No. 7432
TUE. OCT. 10. 1911

Date of writing Report 4 Oct 1911 When handed in at Local Office 10 Port of Rotterdam
 No. in Survey held at Abblasferdam Date, First Survey 6 May Last Survey 2 Oct 1911
 Reg. Book. on the Steel screw steamer "Tendaba" (Number of Visits 11)
 Master E Honoré Built at Bendrik, Doornik By whom built Jonker & Stans When built 1911
 Engines made at Abblasferdam By whom made Abblasferdam'sche Machinefabriek when made 1911
 Boilers made at Abblasferdam By whom made " when made 1911
 Registered Horse Power 39 Owners Abrens, Maurel frères Port belonging to Dakar
 Nom. Horse Power as per Section 28 39 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Vertical compound No. of Cylinders 2 No. of Cranks 2
 Dia. of Cylinders 12 1/16 x 25 7/8 Length of Stroke 13 1/16 Revs. per minute 185 Dia. of Screw shaft 5 1/4 Material of 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 On length 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 ✓ If two
 liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 24 1/4
 Dia. of Tunnel shaft 4 1/8 Dia. of Crank shaft journals 4 1/8 Dia. of Crank pin 4 1/8 Size of Crank webs 3 1/8 x 6 1/8 Dia. of thrust shaft under
 collars 5 1/8 Dia. of screw 5 3/8 Pitch of Screw 6 6 No. of Blades 4 State whether moveable No Total surface 14.25
 No. of Feed pumps One Diameter of ditto 2 7/8 Stroke 5 7/8 Can one be overhauled while the other is at work ✓
 No. of Bilge pumps One Diameter of ditto 2 7/8 Stroke 5 7/8 Can one be overhauled while the other is at work ✓
 No. of Donkey Engines One Sizes of Pumps 4 1/2 x 2 1/4 x 4 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2 in 2" and 1 in 1 1/2" from ejector In Holds, &c. One 2" in fore hold and one 2" in after hold and 1 in 1 1/2" to fore hold to ejector
 No. of Bilge Injections One sizes 2 1/2 Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size Yes 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 None
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
 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 ✓
 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 15 Aug of Stern Tube 15 Aug Screw shaft and Propeller 15 Aug
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.—(Letter for record 3) Manufacturers of Steel Abrens, Schulz, Knaut & Co. Essen
 Total Heating Surface of Boilers 925 Is Forced Draft fitted No No. and Description of Boilers One single ended marine
 Working Pressure 120 lbs Tested by hydraulic pressure to 240 lbs Date of test 24-8-11 No. of Certificate 309
 Can each boiler be worked separately ✓ Area of fire grate in each boiler 30 sq ft No. and Description of Safety Valves to
 each boiler 2 Spring loaded Area of each valve 4.45 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 11 Mean dia. of boilers 9 1/4 Length 9 9/8 Material of shell plates Steel
 Thickness 1/16 Range of tensile strength 28-30 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Lap & riv
 long. seams double but 3 x 1/2 Diameter of rivet holes in long. seams 1 7/16 Pitch of rivets 4 1/2 Lap of plates or width of butt straps 10 3/8
 Per centages of strength of longitudinal joint rivets 110% Working pressure of shell by rules 142 lbs Size of manhole in shell 11 1/16 x 15 1/4
 plate 19.1% No. and Description of Furnaces in each boiler 3 elbowless Material Steel Outside diameter 35 1/16
 Length of plain part 6 x 3/4 Thickness of plates 1 1/2 Description of longitudinal joint Welded No. of strengthening rings ✓
 Working pressure of furnace by the rules 19 1/2 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 23/32
 Pitch of stays to ditto: Sides 7/16 x 6 7/16 Back 1 1/8 x 1 1/2 Top 6 7/16 x 8 1/4 If stays are fitted with nuts or riveted heads riveted Working pressure by rules 137 lbs
 Material of stays Steel Area at smallest part 1.48 Area supported by each stay 59 Working pressure by rules 200 lbs End plates in steam space:
 Material Steel Thickness 23/32 Pitch of stays 1 1/4 x 1 3/4 How are stays secured Double nuts and riveted washers Working pressure by rules 123 lbs Material of stays Steel
 Area at smallest part 3.91 Area supported by each stay 2.37 Working pressure by rules 174 lbs Material of Front plates at bottom Steel
 Thickness 3/4 Material of Lower back plate Steel Thickness 23/32 Greatest pitch of stays 13 x 4 1/2 Working pressure of plate by rules 246 lbs
 Diameter of tubes 3 1/4 Pitch of tubes 4 1/4 x 4 1/4 Material of tube plates Steel Thickness: Front 3/4 Back 13/16 Mean pitch of stays 12 5/8 x 8 7/16
 Pitch across wide water spaces 13 x 4 1/2 Working pressures by rules 276 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 5 7/8 x 1 1/4 Length as per rule 24 7/8 Distance apart 8 1/4 Number and pitch of stays in each 2 stays 6 7/16
 Working pressure by rules 154 lbs Superheater or Steam chest; how connected to boiler Riveted Can the superheater be shut off and the boiler worked
 separately ✓ Diameter 12 3/4 Length 15 1/4 Thickness of shell plates 3/4 Material Steel 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 ✓

