

REPORT ON MACHINERY.

No. 11394

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Port of Rotterdam

No. in Survey held at Schiedam
Reg. Book.

Date, First Survey 14 Feb 1919 Last Survey 28 Aug 1920
(Number of Visits 2)

on the Steel Screw Steamer, ALCHIBA

Master Ebes Built at Schiedam By whom built New Waterway Ship Co When built 1920

Engines made at Schiedam By whom made New Waterway Ship Co when made 1920

Boilers made at Schiedam By whom made " when made 1920

Registered Horse Power Owners Newell Goudmann & Co Port belonging to Rotterdam

Nom. Horse Power as per Section 28 459 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Vertical Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 26 x 42 x 30 Length of Stroke 40 Revs. per minute 66 Dia. of Screw shaft as fitted 14 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 One length 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 If two

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 60"

Dia. of Tunnel shaft as fitted 13 1/2 Dia. of Crank shaft journals as fitted 14 1/2 Dia. of Crank pin 14 Size of Crank webs 9 x 15 1/2 Dia. of thrust shaft under

collars 14 Dia. of screw 17 9/16 Pitch of Screw 17 No. of Blades 4 State whether moveable No Total surface 90 sq

No. of Feed pumps 2 Diameter of ditto 5 5/16 Stroke 10 1/2 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 5 5/16 Stroke 18 1/2 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 4 Sizes of Pumps 8 x 4 x 10 10 x 8 x 11 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 4 at 3 1/2" in tunnel 10 at 3 1/2" In Holds, &c. 2 at 1-2, 3 and 4 each 2 at 3 1/2"

in each compartment one at 3 1/2"

No. of Bilge Injections 1 sizes 8" Connected to condenser or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 1 at 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

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 Bilge pipes 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

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper platform

OILERS, &c.—(Letter for record S) Manufacturers of Steel Messrs William Beames & Co Ltd

Total Heating Surface of Boilers 6660 Is Forced Draft fitted Yes No. and Description of Boilers 3 Single ended Marine boilers

Working Pressure 100 lb. Tested by hydraulic pressure to 270 lb. Date of test 25. 5. 20 No. of Certificate 400

Can each boiler be worked separately Yes Area of fire grate in each boiler 49.5 sq No. and Description of Safety Valves to

each boiler 2 spring loaded Area of each valve 7.67 sq Pressure to which they are adjusted 100 lb. Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork over 16" Mean dia. of boilers 15" Length 11" Material of shell plates Steel

Thickness 1 1/4 Range of tensile strength 20-32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Lap 2 x 2 1/2

ong. seams Double butt Diameter of rivet holes in long. seams 1 1/4 Pitch of rivets 8 1/4 Lap of plates or width of butt straps 18 1/2

Per centages of strength of longitudinal joint rivets 80% Working pressure of shell by rules 184 lb. Size of manhole in shell 12 x 16

Size of compensating ring 6 x 1 1/8 No. and Description of Furnaces in each boiler 3 Monitors Material Steel Outside diameter 5' 9 1/4"

Length of plain part top Thickness of plates crown 3 1/2 Description of longitudinal joint 10 laced No. of strengthening rings

Working pressure of furnace by the rules 195 Combustion chamber plates: Material Steel Thickness: Sides 2 1/2 Back 1 1/2 Top 2 1/2 Bottom 1 1/2

Pitch of stays to ditto: Sides 8 x 8 Back 8 x 8 1/2 Top 8 x 8 1/2 If stays are fitted with nuts or riveted heads Working pressure by rules 206 lb.

Material of stays Steel Area at smallest part 1.40 Area supported by each stay 6.40 Working pressure by rules 105 lb. End plates in steam space:

10 Material Steel Thickness 1 1/2 Pitch of stays 19 x 1 1/2 How are stays secured Secured in plates Working pressure by rules 194 Material of stays Steel

59 Area at smallest part 5.940 Area supported by each stay 32.30 Working pressure by rules 190 Material of Front plates at bottom Steel

59 Thickness 1 1/2 Material of Lower back plate Steel Thickness 1 1/2 Greatest pitch of stays 14 Working pressure of plate by rules 209 lb.

Diameter of tubes 3 1/2 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates Steel Thickness: Front 1 1/2 Back 1 1/2 Mean pitch of stays 8 1/2 x 8 1/2

Pitch across wide water spaces 15 1/2 Working pressures by rules 201 lb. Girders to Chamber tops: Material Steel Depth and

Thickness of girder at centre 2 x 1/2 x 9 1/2 Length as per rule 36 Distance apart 8 1/2 Number and pitch of stays in each 32 x 8

Working pressure by rules 106 lb. Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

43 PERHEATER. Type Schmidt Date of Approval of Plan Tested by Hydraulic Pressure to 540 lb.

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes

Diameter of Safety Valve 2 Pressure to which each is adjusted 105 lb. Is Easing Gear fitted Yes

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