

REPORT ON MACHINERY.

No. 12503

Port of WEST HARTLEPOOL

THUR. 24 NOV 1904

Received at London Office

No. in Survey held at West Hartlepool Date, first Survey 24th June 04 Last Survey 12th Nov^r 1904

Reg. Book. Subj on the Steel screw steamer "Delta" (Number of Visits 54)

Master J. Dekker Built at West Hartlepool By whom built W. Gray & Co Ltd Tons {Gross 2379 Net 1535 When built 1904

Engines made at West Hartlepool By whom made Central Marine & Works when made 1904

Boilers made at West Hartlepool By whom made Central Marine & Works when made 1904

Registered Horse Power 194 Owners Vrachtvaart Maatschappij Port belonging to Amsterdam

Nom. Horse Power as per Section 28 194 Is Refrigerating Machinery fitted No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Compound

No. of Cylinders Three No. of Cranks And

Dia. of Cylinders 21" 33" & 56" Length of Stroke 36" Revs. per minute 65 Dia. of Screw shaft as per rule 1.37 Material of Steel
 as fitted 1.17" screw shaft

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 Yes Length of stern bush 46"

Dia. of Tunnel shaft as per rule 9.78 Dia. of Crank shaft journals as per rule 10.26 Dia. of Crank pin 10 1/2" Size of Crank webs 14 1/2" Dia. of thrust shaft under collars 10 1/2" Dia. of screw 14.6" Pitch of screw 14.3" No. of blades 14 State whether moveable No Total surface 654 sq ft

No. of Feed pumps two Diameter of ditto 3" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Bilge pumps two Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Donkey Engines two Sizes of Pumps 5 1/2" & 8" x 8" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room Three 3" In Holds, &c. four 2 1/2" & Tunnel 3"

No. of bilge injections one sizes 5" Connected to condenser, or to circulating pump Yes Is a separate donkey suction fitted in Engine room & size Yes 3"

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 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 awash

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 Yes How are they protected Yes

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

When were stern tube, propeller, screw shaft, and all connections examined in dry dock Nov 24 Is the screw shaft tunnel watertight Yes

Is it fitted with a watertight door Yes worked from Up platform

BOILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 5008 sq ft Is forced draft fitted No

No. and Description of Boilers Two 4-ble Ended Mills Working Pressure 160 lb Tested by hydraulic pressure to 320 lb

Date of test 29/9/04 Can each boiler be worked separately Yes Area of fire grate in each boiler 36.5 sq ft No. and Description of safety valves to each boiler Two Spring Area of each valve 7.07 sq Pressure to which they are adjusted 165 lb Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 13.0" Length 10.0" Material of shell plates Steel

Thickness 1 1/32" Range of tensile strength 27/32 Are they welded or flanged both Descrip. of riveting: cir. seams all in long long. seams all in shell

Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 7 1/2" Lap of plates or width of butt straps 16 1/2"

Per centages of strength of longitudinal joint rivets 85.1 % Working pressure of shell by rules 166 lb Size of manhole in shell 16" x 12" plate 85.8 %

Size of compensating ring Flanged No. and Description of Furnaces in each boiler Two Brown Material Steel Outside diameter 42 7/8"

Length of plain part top Thickness of plates crown Description of longitudinal joint welded No. of strengthening rings ribbed bottom bottom 1/2"

Working pressure of furnace by the rules 162 lb Combustion chamber plates: Material Steel Thickness: Sides 10/16" Back 10/16" Top 10/16" Bottom 12/16"

Pitch of stays to ditto: Sides 10.5" Back 9" Top 9" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 167 lb

Material of stays Steel Diameter at smallest part 1 1/2" Area supported by each stay 9.9" Working pressure by rules 176 lb End plates in steam space: Material Steel Thickness 1 1/16" Pitch of stays 17.18" How are stays secured all nuts Working pressure by rules 165 lb Material of stays Steel

Diameter at smallest part 2 1/32" Area supported by each stay 17.18" Working pressure by rules 165 lb Material of Front plates at bottom Steel

Thickness 15/16" Material of Lower back plate Steel Thickness 15/16" Greatest pitch of stays 14" Working pressure of plate by rules 160 lb

Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 15/16" Back 10/16" Mean pitch of stays 9"

Pitch across wide water spaces 16 1/4" Working pressures by rules 166 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 7 1/4" x 1 1/4" Length as per rule 27 1/4" Distance apart 8" Number and pitch of Stays in each two 9"

Working pressure by rules 163 lb 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



