

REPORT ON MACHINERY.

Port of WEST HARTLEPOOL

14 JUL 1903

Received at London Office 19

No. in Survey held at Hartlepool Date, first Survey 1st Dec. 1901 Last Survey 22nd July 1903
 Reg. Book. 532 on the Steel S.S. "Tjilatjap" (Number of Visits 112) Gross 3858.55
 Master H. Koops Built at Middlesbrough By whom built Sir Raylton Dixon & Co. When built 1903
 Engines made at Hartlepool By whom made Richardsons, Newcastle & Co. when made 1903
 Boilers made at Hartlepool By whom made Richardsons, Newcastle & Co. when made 1903
 Registered Horse Power 3514 Owners Java-China-Japan Lijn Port belonging to Batavia
 Nom. Horse Power as per Section 28 3514 Is Refrigerating Machinery fitted No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders three No. of Cranks three

Dia. of Cylinders 23" 34" 64" Length of Stroke 42" Revs. per minute 40 Dia. of Screw shaft 13" Lgth. of stern bush 4' 6"
 as per rule 11.45" as fitted 12" Dia. of Crank shaft journals 12" as fitted 12.2" Dia. of Crank pin 12.2" Size of Crank webs 8.5" x 23.5" Dia. of thrust shaft under
 collars 13" Dia. of screw 16-3" Pitch of screw 15-6" No. of blades 4 State whether moveable yes Total surface 76.4 sq ft

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

No. of Bilge pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps Feed 6" x 21" double 12" x 10" double No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Four 3.5" dia In Holds, &c. Two of 3.5" in each hold

One of 3.5" in Tunnel.

No. of bilge injections one sizes 8" Connected to condenser, or to circulating pump circ pump a separate donkey suction fitted in Engine room & size Yes 3.5"

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

When were stern tube, propeller, screw shaft, and all connections examined in dry dock new vessel Is the screw shaft tunnel watertight See ship report

Is it fitted with a watertight door Yes worked from Top grating

BOILERS, &c.—

(Letter for record 12)Total Heating Surface of Boilers 5095 sq ftIs forced draft fitted Yes

No. and Description of Boilers 3 Single ended. by Mult Working Pressure 180 lb Tested by hydraulic pressure to 360 lb

Date of test 9.4.03 Can each boiler be worked separately Yes Area of fire grate in each boiler 39.4 sq ft No. and Description of safety valves to

each boiler 2 Spring direct Area of each valve 8.29 sq in Pressure to which they are adjusted 183 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 21" Mean dia. of boilers 12'-0" Length 12'-0" Material of shell plates steel

Thickness 1" Range of tensile strength 28-32 Are they welded or flanged no Descrip. of riveting: cir. seams double long. seams treble

Diameter of rivet holes in long. seams 1.32" Pitch of rivets 4" Lap of plates or width of butt straps 15.5"

Per centages of strength of longitudinal joint 86.1 Working pressure of shell by rules 181.3 lbs Size of manhole in shell 13" x 14"

Size of compensating ring 28.5" x 24.5" x 1.5" No. and Description of Furnaces in each boiler 2 Morrison Material steel Outside diameter 47.5"

Length of plain part 4'-1" Thickness of plates 9" Description of longitudinal joint weld No. of strengthening rings ✓

Working pressure of furnace by the rules 189 lb Combustion chamber plates: Material steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 3/4"

Pitch of stays to ditto: Sides 7.5" x 7.5" Back 4.5" Top 7.5" x 7.5" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 182 lb

Material of stays iron Diameter at smallest part 1.5" Area supported by each stay 600" Working pressure by rules 221 lb End plates in steam space:

Material steel Thickness 1" Pitch of stays 16" x 14" How are stays secured Pin nasher Working pressure by rules 180 lb Material of stays steel

Diameter at smallest part 2.5" Area supported by each stay 2720" Working pressure by rules 180 lb Material of Front plates at bottom steel

Thickness 1" Material of Lower back plate steel Thickness 1" Greatest pitch of stays 14" Working pressure of plate by rules 240 lb

Diameter of tubes 2.5" Pitch of tubes 3.5" Material of tube plates steel Thickness: Front 1" Back 3/4" Mean pitch of stays 11.5"

Pitch across wide water spaces 14.5" Working pressures by rules 188 lb Girders to Chamber tops: Material steel Depth and

thickness of girder at centre 8.5" x 2" Length as per rule 36" Distance apart 4.5" Number and pitch of Stays in each 2-7.5"

Working pressure by rules 185 lb Superheater or Steam chest; how connected to boiler None 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 ✓

If not, state whether, and when, one will be sent

Is a Report also sent on the Hull of the Ship?

[600-13/8/01-Copyable Ink.]

