

REPORT ON MACHINERY.

Port of WEST HARTLEPOOLWED. 4 JUL 1900
Received at London OfficeSurvey held at Hartlepool
Book.Date, first Survey 6th Sept. 1899Last Survey 15th June 1900(Number of Visits 8)on the 1 yard no. 74S/s Ceres

Tons

Gross

Net

or

Built at Spezia (Italy)By whom built cantiere Navale di Muggiano

When built

es made at HartlepoolBy whom made J. Richardson & Son Ltd

when made

rs made at HartlepoolBy whom made J. Richardson & Son Ltd

when made

stered Horse Power

Owners

Port belonging to

Horse Power as per Section 28 356

Is Electric Light fitted

INES, &c.—Description of Engines

Triple expansionNo. of Cylinders threeNo. of Cranks threeDiameter of Cylinders 24" - 40" - 66"Length of Stroke 48"Revolutions per minute 65Diameter of Screw shaft as per rule 13"Diameter of Tunnel shaft as per rule 11"Diameter of Crank shaft journals 13 1/2"Diameter of Crank pin 14"Size of Crank webs 8 1/2" x 19 1/2"Diameter of screw 16" - 6"Pitch of screw 14" - 9"No. of blades 4State whether moveable noTotal surface 85 sq. ft.of Feed pumps ImoDiameter of ditto 3 1/2"Stroke 27"Can one be overhauled while the other is at work Yesof Bilge pumps ImoDiameter of ditto 3 1/2"Stroke 27"Can one be overhauled while the other is at work Yesof Donkey Engines ImoSizes of Pumps Lead 4 1/2" x 6" duplexBallast 8 1/2" x 4"

No. and size of Sections connected to both Bilge and Donkey pumps

Engine Room

In Holds, &c.

of bilge injections one sizes 5"Connected to condenser, or to circulating pump separate donkey suction fitted in Engine room of size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship

Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the discharge pipes above or below the deep water line

Are they each fitted with a discharge valve always accessible on the plating of the vessel

Are the blow off cocks fitted with a spigot and brass covering plate

Are that pipes are carried through the bunkers

How are they protected

Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges

When were stern tube, propeller, screw shaft, and all connections examined in dry dock

Is the screw shaft tunnel watertight

Is it fitted with a watertight door

worked from

ILERS, &c.—

(Letter for record S)Total Heating Surface of Boilers 4407 sq. ft.Is forced draft fitted YesNo. and Description of Boilers 2 Single ended. byl. Mult.Working Pressure 180 lbs.Tested by hydraulic pressure to 360 lbs.Date of test 15.6.00 Can each boiler be worked separatelyArea of fire grate in each boiler 57 sq. ft.

No. and Description of safety valves to

Each boiler Imo. Spring direct.Area of each valve 11 sq. in.

Pressure to which they are adjusted

Are they fitted

with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean diameter of boilers 14" - 9"Length 11' - 6"Material of shell plates steelThickness 1 3/32"Description of riveting: circum. seams doublelong. seams trebleDiameter of rivet holes in long. seams 1 15/64"Pitch of rivets 8 1/2"Lap of plates or width of butt straps 19"Per centages of strength of longitudinal joint 85.4Working pressure of shell by rules 183.8 lbs.Size of manhole in shell 13" x 16 1/2"Size of compensating ring 28" x 30" x 1 1/32"No. and Description of Furnaces in each boiler 3 MorrisonMaterial steelOutside diameter 47 1/2"Length of main parttop 7' - 9"Thickness of plates 16" 9"bottom 16"Description of longitudinal joint weldNo. of strengthening rings ✓Working pressure of furnace by the rules 185 lbs.Combustion chamber plates: Material steelThickness: Sides 19/32"Back 19/32"Top 19/32"Bottom 1"Pitch of stays to ditto: Sides 8 3/4" x 7 1/2"Back 8 3/4"Top 8"If stays are fitted with nuts or riveted heads nutsWorking pressure by rules 183 lbs.Material of stays steelDiameter at smallest part 1 3/8"Area supported by each stay 65 sq. in.Working pressure by rules 180 lbs.

End plates in steam space:

Material steelThickness 1 1/32"Pitch of stays 17 1/2" x 11 1/4"How are stays secured Double nut washerWorking pressure by rules 192 lbs.Material of stays steelDiameter at smallest part 2 3/8"Area supported by each stay 258 sq. in.Working pressure by rules 190 lbs.Material of Front plates at bottom steelThickness 7/8"Material of Lower back plate steelThickness 25/32"Greatest pitch of stays 12 3/4"Working pressure of plate by rules 180 lbs.Diameter of tubes 2 1/2"Pitch of tubes 3 1/4"Material of tube plates steelThickness: Front 15/16"Back 5/4"Mean pitch of stays 7 1/2"Pitch across wide water spaces 13 1/2"Working pressures by rules 184 lbs.Girders to Chamber tops: Material steel

Depth and

Thickness of girder at centre 7 1/4" x 1 3/4"Length as per rule 31 1/2"Distance apart 8"Number and pitch of Stays in each three 8"Working pressure by rules 189 lbs.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

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

