

## REPORT ON MACHINERY.

No. 50889

Port of *Newcastle.*Received at London Office *LUES. 22 MAY 1906*No. in Survey held at *Newcastle.*Date, first Survey *Aug 29*Last Survey *15<sup>th</sup> May* 1906

Reg. Book:

on the

*SS "Salatis"*(Number of Visits *33*)

Master

Built at *Newcastle.*By whom built *Armstrong Whitworth & Co*Tons { Gross *4775*  
Net *3059*  
When built *1906*Engines made at *Newcastle.*By whom made *Wallsend Slipway & Eng Co*when made *1906.*Boilers made at *"*By whom made *"*when made *1906*

Registered Horse Power

Owners *"Kamos"*Port belonging to *Hamburg.*Nom. Horse Power as per Section 28 *471.*Is Refrigerating Machinery fitted for cargo purposes *no.*Is Electric Light fitted *yes.*ENGINES, &c.—Description of Engines *Triple.*No. of Cylinders *3*No. of Cranks *3*Dia. of Cylinders *24. 45. 45*Length of Stroke *48*Revs. per minute *64.*

Dia. of Screw shaft

as per rule *14.9*

Material of

*19. 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 *✓*

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 *yes.*

If two

liners are fitted, is the shaft lapped or protected between the liners *✓*Length of stern bush *5'5"*

Dia. of Tunnel shaft

as per rule *13.38*as fitted *13.4*

Dia. of Crank shaft journals

as per rule *14.04*as fitted *14.2*Dia. of Crank pin *14.2*Size of Crank webs *23x9.2*

Dia. of thrust shaft under

collars *14.2*Dia. of screw *18.4*Pitch of Screw *1.875*No. of Blades *4.*State whether moveable *M.*Total surface *1104*No. of Feed pumps *Weirs*Diameter of ditto *9.2 x 7"*Stroke *21"*Can one be overhauled while the other is at work *yes*No. of Bilge pumps *2*Diameter of ditto *4.4*Stroke *24"*Can one be overhauled while the other is at work *yes*No. of Donkey Engines *3*Sizes of Pumps *10 x 7 x 12-5 x 6 x 5-4 x 3 x 6*

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

In Engine Room *4 of 32*In Holds, &c. *2 of 32 in each hold.*No. of Bilge Injections *1*sizes *8"*Connected to condenser, or to circulating pump *✓*Is a separate Donkey Suction fitted in Engine room & size *yes.*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 *about*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 *23/3/06.*of Stern Tube *23/3.*Screw shaft and Propeller *23.3.*Is the Screw Shaft Tunnel watertight *yes*Is it fitted with a watertight door *yes*worked from *top platform*BOILERS, &c.—(Letter for record *S*)Manufacturers of Steel *Hoerder, Bergwerfts. Actien Gesellschaft.*Total Heating Surface of Boilers *63604*Is Forced Draft fitted *yes*No. and Description of Boilers *3 Steel. Muel. br.*Working Pressure *180 lbs*Tested by hydraulic pressure to *360.*Date of test *18.12.05*No. of Certificate *7125*Can each boiler be worked separately *yes.*Area of fire grate in each boiler *54 sq. ft.*

No. and Description of Safety Valves to

each boiler *2 Springs*Area of each valve *11.48*Pressure to which they are adjusted *180 lbs*Are they fitted with easing gear *yes*Smallest distance between boilers or uptakes and bunkers or woodwork *2 feet.*Mean dia. of boilers *14.03*Length *11'6"*Material of shell plates *S*Thickness *1 3/16*Range of tensile strength *28-32.*Are the shell plates welded or flanged *suds*Descrip. of riveting: cir. seams *2. Lap*long. seams *2. Butts.*Diameter of rivet holes in long. seams *1 3/2.*Pitch of rivets *9.4"*Lap of plates or width of butt straps *19.4"*

Per centages of strength of longitudinal joint

rivets *89.2*plate *85.47*Working pressure of shell by rules *204 lbs*Size of manhole in shell *16 x 12.*Size of compensating ring *Wheeler*No. and Description of Furnaces in each boiler *3 Momoons*Material *S*Outside diameter *38.2"*

Length of plain part

top *✓*

Thickness of plates

crown *34*bottom *64*Description of longitudinal joint *weld.*No. of strengthening rings *✓*Working pressure of furnace by the rules *205*Combustion chamber plates: Material *S*Thickness: Sides *21/32*Back *5/8"*Top *21/32*Bottom *29/32*Pitch of stays to ditto: Sides *7.2 x 8.8*Back *7.2 x 8.8*Top *7.2 x 7.2*If stays are fitted with nuts or riveted heads *nut.*Working pressure by rules *236*Material of stays *S*Diameter at smallest part *2.03*Area supported by each stay *61.2*Working pressure by rules *242*

End plates in steam space:

Material *S*Thickness *1 1/8"*Pitch of stays *16.2 x 14.2*How are stays secured *d nuts*Working pressure by rules *243*Material of stays *S*Diameter at smallest part *3.05*Area supported by each stay *231.5*Working pressure by rules *218*Material of Front plates at bottom *S*Thickness *1"*Material of Lower back plate *S*Thickness *1 1/16"*Greatest pitch of stays *14.4"*Working pressure of plate by rules *284*Diameter of tubes *2.2"*Pitch of tubes *3.4 x 3.4"*Material of tube plates *S*Thickness: Front *1"*Back *3/4"*Mean pitch of stays *7.2"*Pitch across wide water spaces *13"*Working pressures by rules *212*Girders to Chamber tops: Material *S*

Depth and

thickness of girder at centre *9.2 x 12.*Length as per rule *30.2*Distance apart *7.2"*Number and pitch of stays in each *2 of 8.4"*Working pressure by rules *207*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

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

W 623-03131

Lloyd's Register Foundation



# VERTICAL DONKEY BOILER—

Manufacturers of Steel

See report attached

No. \_\_\_\_\_ Description \_\_\_\_\_  
 Made at \_\_\_\_\_ By whom made \_\_\_\_\_  
 Working pressure \_\_\_\_\_ tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_  
 Valves \_\_\_\_\_ No. of Safety Valves \_\_\_\_\_ Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_  
 If fitted with easing gear \_\_\_\_\_ If steam from main boilers can enter the donkey boiler \_\_\_\_\_  
 Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_  
 Dia. of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_  
 Working pressure of shell by rules \_\_\_\_\_ Thickness of shell crown plates \_\_\_\_\_ Radius of do. \_\_\_\_\_  
 Diameter of furnace Top \_\_\_\_\_ Bottom \_\_\_\_\_ Length of furnace \_\_\_\_\_  
 Working pressure of furnace by rules \_\_\_\_\_ Thickness of furnace crown plates \_\_\_\_\_  
 Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_ Thickness of water tubes \_\_\_\_\_

SPARE GEAR. State the articles supplied:— 1 set connecting rod bolts & nuts. 1 set main bearing bolts & nuts. 1 set coupling bolts & nuts. 1 set valves for steam pumps. 1 set bilge pump valves. Propeller shaft blade blades. Propeller & crank shaft. Nuts bolts and assorted iron

The foregoing is a correct description,

FOR THE WALLBEND SLIPWAY & ENGINEERING CO. LIMITED.

Manufacturer.

Dates of Survey while building { During progress of work in shops - 1905 Aug 29 Sep 4 6 7 14 19 22 28 Oct 2 4 12 25 Nov 1 6 8 14 21 29 Dec 1 3 10 19 28 1906 Jan 30 Feb 20 28  
 During erection on board vessel - Nov 21 30 Apr 1 2 25 May 15  
 Total No. of visits 33

Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders 7-1-06 Slides 7-1-06 Covers 7-1-06 Pistons 7-1-06 Rods 8-1-06  
 Connecting rods 8-1-06 Crank shaft 4/11/05 Thrust shaft 6-11-05 Tunnel shafts 6-11-05 Screw shaft 28/2/06 Propeller 24-4-06  
 Stern tube 24/4, 06. Steam pipes tested 2/06. Engine and boiler seatings 3/4. Engines holding down bolts 5/4  
 Completion of pumping arrangements 15/5. Boilers fixed 5/4, 06. Engines tried under steam 15/4, 06  
 Main boiler safety valves adjusted 15/4, 06. Thickness of adjusting washers PB 1/2 3/4 S 3/4 CB 1/2 3/4 S 3/4 S 3/4  
 Material of Crank shaft S Identification Mark on Do. 14/8/05 Material of Thrust shaft S Identification Mark on Do. 14/8/05  
 Material of Tunnel shafts S Identification Marks on Do. 14/8/05 Material of Screw shafts S Identification Marks on Do. 14/8/05  
 Material of Steam Pipes Steel. Test pressure 360 lb.

General Remarks (State quality of workmanship, opinions as to class, &c. Machinery and boilers built under special survey. Materials and workmanship good. Engines and boilers examined under full steam & found satisfactory. In my opinion this vessel is now eligible for the record of L.M.C. 5/06. in the Register Book.

It is submitted that this vessel is eligible for THE RECORD

L.M.C. 5.06. F.D. ELEC. LIGHT.

The amount of Entry Fee.. £ 3 : : :  
 Special .. £ 48 : 11 : :  
 Donkey Boiler Fee .. £ : : :  
 Travelling Expenses (if any) £ : : :  
 When applied for, 17 MAY 1906  
 When received, 21 MAY 1906

Committee's Minute

FRI. 25 MAY 1906

Assigned

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

MACHINERY CERTIFICATE WRITTEN.

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