

REPORT ON MACHINERY.

SAT. 6 OCT 1900

Port of Rotterdam

Received at London Office

held at Halt Bommel.

Date, first Survey 30 July Last Survey 15 Aug 1900

(Number of Vials)

Steel S.S. "S" 104"

Ton^s } Gross net
 } Net measures

Built at Halt Bommel By whom built J. Meuser

When built 1900

By whom made _____ when made _____

By whom made _____ when made _____

Power _____ Owners Shipping Investments (L^{td}) Port belonging to London

as per Section 28 _____ Voyage to South Shields

2. — Description of Engines Will be fitted at South Shields No. of Cylinders _____

Length of Stroke _____ Revolutions per minute _____ Diameter of Screw shaft _____ as per rule _____ as fitted _____

Diameter of Crank shaft journals _____ Diameter of Crank pin _____ Size of Crank webs _____

Pitch of screw _____ No. of blades _____ State whether moveable _____ Total surface _____

Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____

Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____

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

In Holds, &c. _____

Connected to condenser, or to circulating pump _____ Is a separate donkey suction fitted in Engine room & size _____

Are the roses in Engine room always accessible _____ Are the sluices on Engine room bulkheads always accessible _____

Are they Valves or Cocks _____

Are the discharge pipes above or below the deep water line _____

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

How are they protected _____

Is the screw shaft tunnel watertight _____

worked from _____

3. — (Letter for record) _____ Total Heating Surface of Boilers _____

Boilers Will be fitted at South Shields Working Pressure _____ Tested by hydraulic pressure to _____

Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of safety valves to _____

Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted _____

Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean diameter of boilers _____

Material of shell plates _____ Thickness _____ Description of riveting: circum. seams _____ long. seams _____

Pitch of rivets _____ Lap of plates or width of butt straps _____

Working pressure of shell by rules _____ Size of manhole in shell _____

No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter _____

Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____

Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____

If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____

Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ End plates in steam space: _____

Thickness _____ Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____

Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____

Material of Lower back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____

Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____

Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and _____

Length as per rule _____ Distance apart _____ Number and pitch of Stays in each _____

Superheater or Steam chest; how connected to boiler _____ Can the superheater be shut off and the boiler worked _____

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

Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____



2 opps

DONKEY BOILER— Description *Vertical with cross tubes.*
 Made at *Widdmach* By whom made *G. Black* When made *1900* Where fixed *Stokehold*
 Working pressure *100* tested by hydraulic pressure to *100* No. of Certificate *472* Fire grate area *57.45* Description of safety valves *Direct spring*
 No. of safety valves *one* Area of each *7.07* Pressure to which they are adjusted *100 lb* If fitted with easing gear *yes* If steam from main boilers can enter the donkey boiler *to ascertain*
 Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____
 Description of riveting long seams _____ Diameter of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____
 Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays to do. _____
 Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____
 Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *Mark a Donkey boiler*
N. 472
Lloyd's test
200 lbs
J. F. 29.3.00.
 The foregoing is a correct description,
 Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c.)
For further description of Donkey boiler please see Leith report N. 4380 hereto attached.
A temporary funnel had been made to get steam for testing of safety valve and to work the winches.
As regards the Pipe arrangement, the cast iron suction pipe 2 1/2" and two pipes in bunker have been laid as per sketch hereto attached, given by the owners, and remains to be further dealt with at South Shields where machinery & boiler will be fitted by Messrs D. J. Gray.

Certificate (if required) to be sent to _____
 The amount of Entry Fee. . . £ : :
 Special £ 2 : 2 :
 Donkey Boiler Fee £ : :
 Travelling Expenses (if any) £ 1 : 15 :
 Committee's Minute
 Assigned

W. F. D. M. Bluffin
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

TUES. 9 OCT 1900

The Surveyors are requested not to write on or above the space for Committee's Minutes.