

REPORT ON MACHINERY.

NO. 2990 4

SAT. 6 OCT 1900

Port of Rotterdam Received at London Office _____

Held at Yalt Bommel. Date, first Survey 30 July Last Survey 15 Aug 1900
(Number of Visits _____)

Steel S.S. "S 104" Tons { Gross net
Net measures

Built at Yalt Bommel By whom built J. Meuser When built 1900

By whom made _____ when made _____

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Power _____ Owners Shipping Investments (Ld.) Port belonging to London
Voyage to South Shields

as per Section 28

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 _____

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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 _____

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

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

Is the screw shaft tunnel watertight _____

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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 _____

Distance between rings _____ Working pressure by rules _____ End plates: Thickness _____ How stayed _____

Area of safety valves to superheater _____ Are they fitted with casing gear _____



DONKEY BOILER— Description *Vertical with cross tubes.*
 Made at *Widdmarch* By whom made *G. Black* When made *1900* Where fixed *Stokehold*
 Working pressure *100* tested by hydraulic pressure to *150* No. of Certificate *472* Fire grate area *57.5* 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. £ : : When applied for, *to be paid here.*
Free Special .. £ 2 : 2 :
 Donkey Boiler Fee .. £ : :
 Travelling Expenses (if any) £ 1 : 15 :
paid see letter attached

Committee's Minute

TUES. 9 OCT 1900

Assigned

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