

REPORT ON BOILERS.

No. 6475

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JUN 9 1908

Date of writing Report 8th June 1908 When handed in at Local Office 19 Port of Belfast
 No. in Survey held at Belfast Date, First Survey See other sheet
 Reg. Book. W.S.P. Rotterdam (Number of Visits) 1 Gross 23980
 on the W.S.P. Rotterdam Tons Net 15020
 Master Belfast Built at Belfast By whom built Harland & Wolff L^{td} When built 1908
 Engines made at Belfast By whom made Harland & Wolff L^{td} when made -
 Boilers made at " By whom made " when made "
 Registered Horse Power ✓ Owners Holland America Line Port belonging to Rotterdam

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel R. Galville & Sons(Letter for record 3) Total Heating Surface of Boilers 5356 sq ft Is forced draft fitted No No. and Description ofBoilers Two Single End Cylindrical Working Pressure 215 lbs Tested by hydraulic pressure to 430 lbs Date of test 28-11-07No. of Certificate 407 Can each boiler be worked separately Yes Area of fire grate in each boiler 62 sq ft No. and Description ofsafety valves to each boiler Two Direct Spring Area of each valve 10.32 sq Pressure to which they are adjusted 215 lbsAre they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓Smallest distance between boilers or uptakes and bunkers or woodwork About 30" Mean dia. of boilers 15'-4" Length 11'-3"Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 29-32 tons Are the shell plates welded or flanged NoDescrip. of riveting: cir. seams Lap Riveting seams Butt Riveting Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 10"Lap of plates or width of butt straps 23 1/2" Per centages of strength of longitudinal joint 96.9 Working pressure of shell byrules 244 lbs Size of manhole in shell 16" x 12" Size of compensating ring No No. and Description of Furnaces in eachboiler 3 - Monomax Material Steel Outside diameter 49 1/2" Length of plain part 2' Thickness of plates 23"Description of longitudinal joint Weld No. of strengthening rings ✓ Working pressure of furnace by the rules 242 lbs Combustion chamberplates: Material Steel Thickness: Sides 5" Back 5" Top 5" Bottom 1 1/2" Pitch of stays to ditto: Sides 8 1/2" x 7 1/2" Back 8 1/2" x 7 1/2"Top 8 1/2" x 7 1/2" If stays are fitted with nuts or riveted heads Nuts inside Working pressure by rules 216 lbs Material of stays Steel Diameter atsmallest part 1 1/2" Area supported by one stay 6 1/2" Working pressure by rules 256 lbs Material of plates in steam space: Material Steel Thickness 1 1/8"Pitch of stays 18" x 13" How are stays secured Nuts inside Working pressure by rules 218 lbs Material of stays Steel Diameter at smallest part 2 1/2"Area supported by one stay 270 sq Working pressure by rules 239 lbs Material of Front plates at bottom Steel Thickness 4 1/2" Material ofLower back plate Steel Thickness 4 1/2" Greatest pitch of stays 12 1/2" Working pressure of plate by rules 289 lbs Diameter of tubes 2 1/2"Pitch of tubes 4" x 4" Material of tube plate Steel Thickness: Front 7" Back 7" x 1/2" Mean pitch of stays 8" x 8" Pitch across widewater spaces 14" Working pressures by rules 337 lbs Girders to Chamber tops: Material Iron Depth and thickness ofgirder at centre 10" x (8" x 2) Length as per rule 32" Distance apart 8 1/2" Number and pitch of Stays in each 3 - 7 1/2"Working pressure by rules 234 lbs Superheater or Steam chest: how connected to boiler Can the superheater be shut off and the boiler workedseparately ✓ Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivetholes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates ThicknessIf stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed Working pressure of end platesArea of safety valves to superheater Are they fitted with easing gear

The foregoing is a correct description,

Harland & Wolff Ltd

Manufacturer.

Dates of Survey During progress of
work in shops - -
while
building During erection on
board vessel - - -

See other sheet.Is the approved plan of boiler forwarded herewith YesTotal No. of visits 1

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

Survey Fee ... £ : : When applied for, ... 19.
 Travelling Expenses (if any) £ : : When received, ... 19.

Committee's Minute WED. 10 JUN 1908Assigned See minuteon attached report

P. J. O'Brien
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Lloyd's Register
 Foundation

W213-0162 (112)

Belport

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S.S. "Rotterdam"List of Pumps.

2 Pair Main Feed	12 $\frac{1}{2}$ " x 18" x 26"
2 General Duplex	10 $\frac{1}{2}$ " x 7" x 12"
1 Ash Ejector Pump Duplex	10 $\frac{1}{2}$ " x 7" x 12"
2 Westminster Ballast	15" x 14" x 15"
2 Sanitary Duplex	10" x 10" x 12"
2 Bilge Duplex	8" x 8" x 9"
1 Fresh Water Duplex	5" x 5" x 10"
1 " " "	8 $\frac{1}{2}$ " x 9" x 15"
1 Crap-Feed Pump Main	4" x 3 $\frac{1}{2}$ " x 8"

Spare Gear

2 Propeller blades, Pair Crank pin bushes, 2 Propeller shafts, 2 Propeller boxes; Guide shaft: Air pump rod, bucket, head valve, & foot valve; Centrifugal impeller & spindle; H.P. valve spindle & neck bush; L.P. valve spindle & neck bush; Two tie strap complete; Pair top end bushes; Link block & bushes; Centrifugal engine crank pin bushes, piston, piston rod, valve & spindle; sets of valves for Air, Bilge, Ballast, Feed, Sanitary & other pumps; 60 condenser tubes & 120 ferrules; 240 Induction tubes; sets & studs & nuts for Propeller blades; 4 cylinder escape valve & springs; 1 Feed escape valve spring; set rings for H.P. piston valve & set for L.P. piston valve; sets of piston rings for all pumps etc. and all gear to Lloyd's Rules in addition

R. J. Penning