

REPORT ON BOILERS.

No. 6475

Received at London Office 1865 9 JUN 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) } Gross 23980
 on the } Net 15020
 Master Belfast Built at Belfast By whom built Harland & Wolff L^{td} When built 1908
 Engines made at Belfast By whom made " when made "
 Boilers made at " By whom made " when made "
 Registered Horse Power ✓ Owners Holland America Lijn Port belonging to Rotterdam

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel R. Galville & Sons

(Letter for record 5) Total Heating Surface of Boilers 5356 sq ft Is forced draft fitted No No. and Description of Boilers Two - Single End Cylind Working Pressure 215 lbs Tested by hydraulic pressure to 430 lbs Date of test 28-11-07
 No. of Certificate 407 Can each boiler be worked separately Yes Area of fire grate in each boiler 62 sq ft No. and Description of safety valves to each boiler Two - Direct Spring Area of each valve 10.32 sq Pressure to which they are adjusted 215 lbs
 Are 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 No
 Descrip. of riveting: cir. seams Lap Butt seams Butt Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 10"
 Lap of plates or width of butt straps 2 3/2" Per centages of strength of longitudinal joint rivets 96.9 Working pressure of shell by rules 249 lbs Size of manhole in shell 16" x 12" Size of compensating ring W. Keils No. and Description of Furnaces in each boiler 3 - No. 1 Material Steel Outside diameter 49 1/2" Length of plain part 2' Thickness of plates crown 2 3/8" bottom 3 1/2"
 Description of longitudinal joint Weld No. of strengthening rings ✓ Working pressure of furnace by the rules 242 lbs Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 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 at smallest part 1 1/2" Area supported by one stay 6 1/2" Working pressure by rules 256 lbs plates in steam space: Material Steel Thickness 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 9/16"
 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 of Lower 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 7/8" Back 7/8" + 1/8" Mean pitch of stays 8" x 8" Pitch across wide water spaces 14" Working pressures by rules 337 lbs with 7/8" Rouben Girders to Chamber tops: Material Iron Depth and thickness of girder 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 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

The foregoing is a correct description,
Harland & Wolff L^{td} 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 Yes
 Total No. of visits "

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

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

R. J. O. Currid 19
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute WED. 10 JUN 1908

Assigned see minute on attached report



Belfast

T.S.S. "Rotterdam"

List of Pumps.

2 Pair Main Feed	12 1/2" x 18" x 26"
2 General Duplex	10 1/2" x 7" x 12"
1 Ash Collector Pump Duplex	10 1/2" x 7" x 12"
2 Washwater 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 1/2" x 9" x 15"
1 Crap Feed Pump Main	4" x 3 1/2" x 8"

Spare Gear

2 Propeller blades, Pair Crank pin bushes, 2 Propeller shafts
 2 Propeller boxes; Guide shaft: Air pump work, bucket, head
 valve, & port valve; Centrifugal impeller & spindle; H.P. valve spindle
 & neck bush; L.P. valve spindle & neck bush; Exhaust strap
 complete; Pair top end bushes; Link block & bushes;
 Centrifugal engine crank pin bushes, piston, piston work, valve
 & spindle; sets of valves for Air, Bilge, Ballast, Feed, Sanitary
 & other pumps; 60 condenser tubes & 120 ferrules; 240 Inlet
 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