

REPORT ON BOILERS.

No. 6158
THUR. 23 AUG 1906

Port of Belfast Received at London Office Belfast
 No. in Survey held at Belfast Date, first Survey Sept. 16th Last Survey Aug 13th 1906
 Reg. Book. S.P. Bronsa (Number of Visits 74) Gross 7970
 on the R. Fletcher Built at Belfast By whom built Harland & Wolff Ltd Tons Net 4523
 Master Belfast When built 1906
 Engines made at Belfast By whom made Harland & Wolff Ltd when made
 Boilers made at Belfast By whom made Harland & Wolff Ltd when made
 Registered Horse Power 2000 Owners Pacific Steam Navigation Co Port belonging Liverpool

MULTITUBULAR BOILERS—MAIN, Single End Manufacturers of Steel N. Colville & Co Ltd

(Letter for record 3) Total Heating Surface of Boilers 6903 sq ft Is forced draft fitted No No. and Description of Boilers 3 Single End Cylinders Working Pressure 215 lbs Tested by hydraulic pressure to 430 lbs Date of test 30-4-06
 No. of Certificate 377 Can each boiler be worked separately Yes Area of fire grate in each boiler 58 1/2 sq ft and Description of safety valves to each boiler 2 Direct Spring Area of each valve 8.29 sq in 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 Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 30 in Mean dia. of boilers 15'-0" Length 10'-6"
 Material of shell plates Steel Thickness 1 1/2 in Range of tensile strength 29-32 tons the shell plates welded or flanged No
 Descrip. of riveting: cir. seams Lap long. seams Butt Diameter of rivet holes in long. seams 1 1/2 in Pitch of rivets 10 in
 Lap of plates or width of butt straps 22 3/4 in Per centages of strength of longitudinal joint 92.9 Working pressure of shell by rules 247 lbs Size of manhole in shell 16" x 12" Size of compensating rivets No No. and Description of Furnaces in each boiler 3 Morrison Material Steel Outside diameter 47 in Length of plain part 10 in Thickness of plates 3 1/2 in
 Description of longitudinal joint Weld No. of strengthening rings 0 Working pressure of furnace by the rules 241 lbs Combustion chamber plates: Material Steel Thickness: Sides 5 in Back 5 in Top 5 in Bottom 7 in Pitch of stays to ditto: Side 8 1/2 x 7 1/2 Back 8 1/2 x 7 1/2
 Top 8 1/2 x 7 1/2 stays are fitted with nuts or riveted heads Nuts Working pressure by rules 217 lbs Material of stays Steel Diameter at smallest part 1 1/2 in Area supported by each stay 6 1/2 sq in Working pressure by rule 257 lbs plates in steam space: Material Steel Thickness 1 1/2 in
 Pitch of stays 7 1/2 x 1 1/2 How are stays secured Nuts & Washers Working pressure by rule 279 lbs Material of stays Steel Diameter at smallest part 2 1/2 in
 Area supported by one stay 262 1/2 sq in Working pressure by rules 246 lbs Material of Front plates at bottom Steel Thickness 1 1/2 in Material of Lower back plate Steel Thickness 1 1/2 in Greatest pitch of stays 13 in Working pressure of plate by rule 157 lbs Diameter of tubes 2 1/2 in
 Pitch of tubes 4" x 4" Material of tube plates Steel Thickness: Front 1 1/2 in Back 1 1/2 in Mean pitch of stays 8 x 8 Pitch across wide water spaces 14 1/2 in Working pressures by rules 254 lbs with 1 1/2 Double Orders to Chamber tops: Material Iron Depth and thickness of girder at centre 9" x (8" x 2) Length as per rule 30 1/2 in Distance apart 8 1/2 in Number and pitch of Stays in each 3-7 1/2 in
 Working pressure by rules 221 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

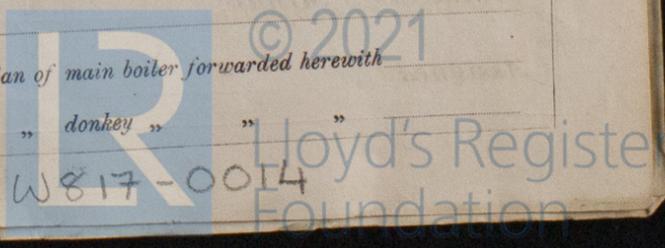
VERTICAL DONKEY BOILER— No. Description Manufacturers of steel

Made at By whom made When made Where fixed Working pressure
 tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety 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 Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets
 Lap of plating Per centage of strength of joint Rivets Working pressure of shell by rules 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 Working pressure of furnace by rules Thickness of furnace crown plates Radius of do. Stayed by Diameter of uptake Thickness of uptake plates
 Thickness of water tubes

The foregoing is a correct description,
 for Harland & Wolff Ltd Manufacturer.

See other sheets

Is the approved plan of main boiler forwarded herewith



[Im. 12/06 Copyright Ink.]

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

3 Crankshaft
 1 Propeller
 2 Halls Manf. Bronze
 1 Boss
 2 Main Cross heads guide blocks
 2 Piston Rods & nuts
 1 Pair top end bushes
 1 bottom
 2 Eccentric Rods
 2 Pulleys
 2 Straps
 1 Air pump rod
 1 bucket
 1 delivery valve
 Set pump lever bushes
 2 Feed or Pilsa pump plungers
 2 Main slide valve & spindles
 1 Thrust ring
 Set packing rings for each Piston valve set
 and all gear to Days Rules additional

Last
 ab
 sq ton
 123
 264
 1822
 153
 106
 118
 109
 147
 54
 41
 1163

Certificate (if required) to be sent to the Shipowners are requested not to write on or below the space for Committee's Minutes. Assigned

The amount of Entry Fee...	£	:	:	When applied for.
Special	...	£	:	19
Donkey Boiler Fee	...	£	:	When received.
Travelling Expenses (if any)	£	:	:	19

R. J. Pennington
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. 24 AUG 1906

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 Note