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REPORT ON BOILERS.

No. 37971

RECEIVED NEW YORK *Sept. 12-1918*
 Surveying Report *16th July 1918* When handed in at Local Office *1918* Port of *Glasgow*
 in Survey held at *Glasgow* Date, First Survey *28-11-17* Last Survey *9th July 1918*
 Book. on the *Howden Patent Boiler No 193 for Imperial Munitions Board of Canada* (Number of Visits *33*)
 Built at _____ By whom built _____ When built _____
 Made at _____ By whom made _____ When made _____
 Made at *Glasgow* By whom made *The Howden Boiler & Armaments Co Ltd* When made *1918*
 Rated Horse Power _____ Owners *Imperial Munitions Board of Canada* Port belonging to _____

WATER TUBE
 TUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *D. Colville & Sons Ltd.*
 For record (S) Total Heating Surface of Boilers *2640 sq. ft.* Is forced draft fitted *Yes* No. and Description of
 One *Howden Water Tube Boiler (3 elements)* Working Pressure *185* Tested by hydraulic pressure to *370* Date of test *21/6/18*
 of Certificate *14377* Can each boiler be worked separately *one* Area of fire grate in each boiler *60 sq. ft.* No. and Description of
 valves to each boiler _____ Area of each valve _____ Pressure to which they are adjusted _____
 they fitted with easing gear _____ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler _____
 Closest distance between boilers or uptakes and bunkers or woodwork _____ Mean dia. of boilers *36 7/8"* Length *S.D. 11'-6 1/2"*
 Material of shell plates *S* Thickness *S.D. 1/2"* Range of tensile strength *S.D. 28/32* Are the shell plates welded or flanged *No*
 Strip of riveting: cir. seams *Long Riv Lap* long. seams *Long Riv Lap* Diameter of rivet holes in long. seams *7/8"* Pitch of rivets *S.D. 2.56*
 of plates or width of butt straps *4 3/16* Per centages of strength of longitudinal joint *rivets S.D. 79.86 W.D. 68.85* Working pressure of shell by
228 lbs. Size of manhole in shell *ends 16" x 12"* Size of compensating ring *Flanged* No. and Description of Furnaces in each
 Material _____ Outside diameter _____ Length of plain part _____ Thickness of plates _____
 Description of longitudinal joint _____ No. of strengthening rings _____ Working pressure of furnace by the rules _____
 Material *S* Thickness: Sides _____ Back _____ Top _____ Bottom _____ Pitch of stays to ditto: Sides _____ Back _____
 If stays are fitted with nuts or riveted heads *Riv. Heads* Working pressure by rules *185 lbs.* Material of stays *Steel* Area at
 Closest part *1'-0 1/2"* Area supported by each stay *4.0-5.5 sq. in.* Working pressure by rules *200* End plates in steam space: Material *S* Thickness *7/8 & 3/4*
 of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____ Area at smallest part _____
 Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____ Thickness _____ Material of
 rear back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____ Diameter of tubes *2" O.D.*
 of tubes *28 & 33* Material of tube plates *S* Thickness: Top *1 3/8"* Bottom *1 3/8"* Mean pitch of stays _____ Pitch across wide
 of spaces _____ Working pressures by rules *185 appd.* Girders to Chamber tops: Material *S* Depth and thickness of
 plates at centre *6 1/4" x 2 1/4"* Length as per rule *33* Distance apart *6"* Number and pitch of Stays in each *4 at 6 3/4"*
 Working pressure by rules *200 lbs.* Steam drum: description of joint to shell *Forged and Flanged Neck* % of strength of joint _____
 Diameter *30"* Thickness of shell plates *7/16"* Material *S* Description of longitudinal joint *D.R. Lap* Diam. of rivet holes *13/16*
 Pitch of rivets *2 1/2"* Working pressure of shell by rules *228 lbs.* Crown plates _____ Thickness _____ How stayed *dished*

SUPERHEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

The foregoing is a correct description,

Manufacturer.

Dates During progress of 1917 Nov: 28, 30. Dec: 10, 14, 24, 26, 1918 Jan: 7, 10. Feb: 6, 8, 14 Is the approved plan of boiler forwarded herewith *Yes*
 Survey work in shops - - -
 while During erection on 20, 25, 26 Mar: 6, 7, 11, 18, 20, 22, 25. Apr: 4, 5, 9, 13, 16, 18, 24 Total No. of visits *33*
 building board vessel - - - 30, MAY 29 JUNE 21 JULY 3, 9

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

The material and workmanship is good.

The boiler has been built under Special Survey, and sent to Montreal, Canada.

Survey Fee ... £ _____ When applied for, _____ 191 _____
 Travelling Expenses (if any) £ _____ When received, _____ 191 _____

Committee's Minute

Signed

TUE. 11 FEB. 1919

TUE. APR. 27 1920

(Sgd)

Peter Mc Gregor

Engineer Surveyor to Lloyd's Register of Shipping.

TUE. MAY. 4 1920

Lloyd's Register
Foundation

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