

REPORT ON WATER TUBE BOILERS.

No. 47531

Received at London Office

1 FEB 1928

of writing Report

191

When handed in at Local Office 30.1.1928

Port of Glasgow

No. in

Survey held at Glasgow

Date, First Survey 13.12.26

Last Survey 17 Jan. 1928

Fig. Bk.

010.

on the Twin S.S. Beauford

Number of Visits 32

Gross Tons

Net Tons

Boiler

Built at Glasgow

By whom built Barclay Curle & Co. Ltd.

When built 1928

Engines made at Wallsend

By whom made Parsons Marine Steam Turbine Co. Ltd.

When made 1928

Boilers made at Glasgow

By whom made James & Co. (1927) Ltd.

When made 1928

Registered Horse Power

Owners Canadian Pacific Steamships Ltd.

Port belonging to London

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel

Steel Co. of Scotland

Letter for Record S

Date of Approval of plan 5.8.26

Number and Description or Type

Boilers 4 James water tube

Working Pressure 250 lbs

Tested by Hydraulic Pressure to 425 lbs

Date of Test 17.5.27: 4.6.27

Boiler of Certificate 17427

Can each boiler be worked separately y/n

Total Heating Surface of Boilers 12620 sq ft

Boiler forced draught fitted y/n

Area of fire grate (coal) in each Boiler 80 sq ft

Total grate area of boilers in vessel including

Boiler main and Auxiliary 435.5 sq ft

No. and type of burners (oil) in each boiler

No. and description of safety valves on

Boiler 2 direct spring high lift improved

Area of each valve 4.08 sq ft

Pressure to which they are adjusted 250 lbs

Boiler they fitted with easing gear y/n

In case of donkey boilers state whether steam from main boilers can enter the donkey boiler

Boiler smallest distance between boilers or uptakes and bunkers or woodwork will clear

Height of Boiler 22-10

Width and Length 20-0: 16-6

Boiler steam Drums: Number in each boiler One

Inside diameter 50

Material of plates S

Thickness 2/32

Boiler range of Tensile Strength 28-35 Tons

Are drum shell plates welded or flanged

Description of riveting:—

Boiler Cir. seams double

long. seams double

Diameter of rivet holes in long. seams 3 1/2

Pitch of Rivets 3 1/2

Boiler Lap of plate or width of butt straps 9

Thickness of straps 9/16

Percentage strength of long. joint:—Plate 45 Rivet 80.6

Boiler diameter of tube holes in drum 1 3/4 - 1 1/4

Pitch of tube holes 28.38: 1 1/8

Percentage strength of shell in way of tubes 48.1

Boiler Drum has a flat side state method of staying

Depth and thickness of girders at centre

Boiler fitted y/n

Distance apart

Number and pitch of stays in each

Working pressure

Boiler rules 280 lbs

Steam Drum Heads or Ends:—Material S

Thickness 1 1/4

Radius or how stayed 50

Boiler size of Manhole or Handhole 16x12

Water Drums: Number in each boiler 3

Inside Diameter 23

Boiler material of plates S

Thickness 5/8

Range of tensile strength 28-35 Tons

Are drum shell plates welded

Boiler flanged 20

Description of riveting:—Cir. seams double

long. seams double

Diameter of Rivet Holes in

Boiler long. seams 13/16

Pitch of rivets 3 1/2

Lap of plates or width of butt straps 8 1/2

Thickness of straps 9/16

Boiler percentage strength of long. joint:—Plate 16.8

Rivet 43.5

Diameter of tube holes in drum 1 3/4: 1 1/4

Pitch of tube holes 28.38: 1 1/8

Boiler percentage strength of drum shell in way of tubes 40

Water Drum Heads or Ends:—Material S

Thickness 3/4

Boiler radius or how stayed 2 1/2

Size of manhole or handhole 16x12

Headers or Sections:—Number

Boiler material

Thickness

Tested by Hydraulic Pressure to

Material of Stays

Boiler area at smallest part

Area supported by each stay

Working Pressure by Rules

Tubes:—Diameter

Boiler thickness

Number

Steam Dome or Collector:—Description of Joint to Shell

Boiler percentage strength of Joint

Diameter

Thickness of shell plates

Material

Boiler description of longitudinal joint

Diameter of Rivet Holes

Pitch of Rivets

Working Pressure of shell

Boiler Rules

Crown or End Plates:—Material

Thickness

How stayed

Boiler SUPERHEATER

Type James self drawing

Date of Approval of Plan 12.10.26

Tested by Hydraulic Pressure to 425 lbs

Boiler date of Test 17.5.27: 4.6.27

Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler y/n

Boiler diameter of Safety Valve

Pressure to which each is adjusted

Is easing gear fitted y/n

Boiler a drain cock or valve fitted at lowest point of superheater y/n

Number, diameter, and thickness of tubes 153 @ 1 1/2 - 12 L.A.S.

Boiler Gaskets or joints:—Manhole

Handhole

Handhole plates

The foregoing is a correct description,

YARROW & CO. LTD. Manufacturer.

Dates

During progress of work in shops

1926 Dec 13-23 (1927) Jan 12-19 Feb 3-14 18-24

Is the approved plan of boiler forwarded herewith

Survey while

During erection on board vessel

Mar 2-7 18-31 Apr 5-12 19-22 29 May 11-17 26 Jun

Total No. of visits

32

Survey while

During erection on board vessel

17-17 July 5 Aug 15-16-30 Sep 12 Oct 5-11-20 (1928) Jan 17

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

These Boilers have been built under special Survey and in accordance with the approved plans. The materials and workmanship are good. On completion they together with Superheaters have been tested by hydraulic pressure and found tight. The Boilers have been efficiently secured in position on board.

Survey Fee ... £ 54 : 11 :

When applied for, 31.1.28

Travelling Expenses (if any) £

When received, 31.2.28

James D. Munro
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 31 JAN 1928

Assigned to accompanying Machinery Report. W.M.M.

