

REPORT ON BOILERS.

No. 49090

24 APR 1929

Received at London Office

Report

192

When handed in at Local Office

20

1929

Port of

Glasgow

Survey held at

Dumbarton

Date First Survey

24.5.28

Last Survey

17 April 1929

Book.

on the

M. V. "Austrelind"

(Number of Visits

51

Gross 5020

Tons

Net 3051

ster

Built at

Dumbarton

By whom built

W. Denny & Bros Ltd

Yard No.

9277

When built

1929

Engines made at

Dumbarton

By whom made

W. Denny & Bros Ltd

Engine No.

969

When made

1929

Boilers made at

Dumbarton

By whom made

W. Denny & Bros Ltd

Boiler No.

969

When made

1929

and nominal Horse Power

44

Owners

Australind S. S. Co Ltd

Port belonging to

London

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Jas Dunlop & Co Ltd

(Letter for Record S.)

Heating Surface of Boilers

660 sq

Is forced draught fitted

Coal or Oil fired Oil

Description of Boilers

1-Multitubular

Working Pressure 125

Tested by hydraulic pressure to

238

Date of test

18-1-29

No. of Certificate

18172

Can each boiler be worked separately

No. and Description of safety valves to each boiler

2

S. L. H. L.

Pressure to which they are adjusted

130

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

Will clear

Is oil fuel carried in the double bottom under boilers

no

Smallest distance between shell of boiler and tank top plating

Will clear

Is the bottom of the boiler insulated

no

Largest internal dia. of boilers

8'-9"

Length

9'-0"

Shell plates: Material

8

Tensile strength

28-32

Thickness

9/16"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end

inter

circ. seams

13/16"

Pitch of rivets

2-76

4 3/16"

g. seams

J. R. D. B. S.

Diameter of rivet holes in

circ. seams

70.5

long. seams

3/4"

Percentage of strength of circ. end seams

54.79

Percentage of strength of circ. intermediate seam

82

Working pressure of shell by Rules

127

Percentage of strength of longitudinal joint

85.6

combined

93

Thickness of butt straps

outer

7/16"

inner

9/16"

No. and Description of Furnaces in each Boiler

1-Monobloc

Material

8

Tensile strength

26-30

Smallest outside diameter

42 3/8"

Length of plate part

top

7/16"

bottom

Thickness of plates

7/16"

Description of longitudinal joint

weld

Dimensions of stiffening rings on furnace or c.c. bottom

7/16"

Working pressure of furnace by Rules

145

Material

8

Tensile strength

26-30

Thickness

13/16"

Pitch of stays

22d

Are stays secured

J. N.

Working pressure by Rules

125

Material

8

Tensile strength

26-30

Thickness

13/16"

Working pressure

185

Pitch of stay tubes in nests

10-32"

Pitch across wide water spaces

12"

Working pressure

185

Material

8

Tensile strength

26-32

Depth and thickness of girder

No. and pitch of stays

8

Material

8

Tensile strength

26-30

Thickness

13/16"

Working pressure

185

Material

8

Tensile strength

26-32

Depth and thickness of girder

No. and pitch of stays

8

Material

8

Tensile strength

26-32

Depth and thickness of girder

No. and pitch of stays

8

Material

8

Tensile strength

26-32

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Material

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No. and pitch of stays

8

Material

8

Tensile strength

26-32

Depth and thickness of girder

No. and pitch of stays

Working pressure by Rules 135 Are the stays drilled at the outer ends *Yes* Margin stays: Diameter *At turned off part or Over threads* 1 1/2" No. of threads per inch 9 Area supported by each stay 76" Working pressure by Rules 10 L.S.C. Tubes: Material *Iron* External diameter *Plain* 3" Thickness 5/16" No. of threads per inch 9 Pitch of tubes 4 1/8" x 4 1/8" Working pressure by Rules 140 Manhole compensation: Size of opening in shell plate 17" x 13" Section of compensating ring 30" x 30" No. of rivets and diameter of rivet holes 36 - 1 3/16" Outer row rivet pitch at ends 5 1/2" Depth of flange if manhole flanged ✓ Steam Dome: Material Tensile strength Thickness of shell Description of longitudinal joint Pitch of rivets Percentage of strength of joint Plate Rivets Diameter of rivet holes Internal diameter Working pressure by Rules Thickness of crown No. and diameter of stays Inner radius of crown Working pressure by Rules How connected to shell Size of doubling plate under dome Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell Type of Superheater Manufacturers of Tubes Steel castings Number of elements Material of tubes Internal diameter and thickness of tubes Material of headers Tensile strength Thickness Can the superheater be shut off and the boiler be worked separately Is a safety valve fitted to every part of the superheater which can be shut off from the boiler Area of each safety valve Are the safety valves fitted with easing gear Working pressure as per Rules Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes castings and after assembly in place Are drain cocks or valves fitted to free the superheater from water where necessary Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

WILLIAM DENNY & BROTHERS, LTD The foregoing is a correct description,

Wm. K. Mison Director Manufacturer

Dates of Survey { During progress of work in shops - - } See Accompanying Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) while building { During erection on board vessel - - } machy Report Total No. of visits 51

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under special survey in accordance with the approved plan, and the Society's Rules and requirements, the materials and workmanship are good, it has been securely fitted on board, and the safety valves adjusted under steam.*

A.C.
20/4/29

Survey Fee ... £ 4:4:0 When applied for 19.4.1929 Travelling Expenses (if any) £ 0:0:0 When received 25/4/1929

Jas. Cairns
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 23 APR 1929 Assigned *See Accompanying machy Report W.M.*