

## REPORT ON BOILERS.

No. 34689

Received at London Office

WED. DEC. 30. 1914

Date of writing Report 3.10.14 When handed in at Local Office 10.14

Port of GLASGOW

No. in Survey held at Glasgow

Date, First Survey 29/7/14

Last Survey 13/10/14

Reg. Book.

28p on the

S.S. 'KINABALLU'

(Number of Visits 12)

Gross

Tons

Net

Master Lawer.

Built at Ardrossan

By whom built

Ardrossan &amp; Co (260)

When built 1914

Engines made at

Glasgow.

By whom made

J. &amp; K. Barclay (788)

When made 1914

Boilers made at

Glasgow.

By whom made

Dunsmuir &amp; Jackson (333)

When made 1914

Registered Horse Power

84.2.

Owners

Selok S.S. Co (Malay States)

Port belonging to Ardrossan.

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel Bolville, Gt. St. Steel Co. &amp; Spencer

Letter for record

S

Total Heating Surface of Boilers

16994

Is forced draft fitted

No

No. and Description of

Boilers

one single ended

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test 13.10.14

No. of Certificate

12894

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

54.7

No. and Description of

Safety valves to each boiler

Pair spring loaded

Area of each valve

5.9

Pressure to which they are adjusted

180 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

plates and bunkers on woodwork

10"

Mean dia. of boilers

13-7/32"

Length

10-6"

Material of shell plates

S

Thickness

17/32"

Range of tensile strength

28/32"

Are the shell plates welded or flanged

—

Description of riveting: cir. seams

DR

long. seams

TR 10 BS

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

8 7/8"

Pitch of plates or width of butt straps

1-7/8"

Per centages of strength of longitudinal joint

rivets 84.4

plate 85.9

Working pressure of shell by

Boilers

220

Size of manhole in shell

16 x 12"

Size of compensating ring

39 x 17 1/2"

No. and Description of Furnaces in each

Description of longitudinal joint

weld

No. of strengthening rings

one

Working pressure of furnace by the rules

182

Combustion chamber

Material

S

Thickness: Sides

1 1/16"

Back

5/8"

Top

1 1/16"

Bottom

7/8"

Pitch of stays to ditto: Sides

9 7/8"

Back

8 7/8"

If stays are fitted with nuts or riveted heads

Rub

Working pressure by rules

194

Material of stays

S

Diameter at

Smallest part

area supported by each stay

82.25"

Working pressure by rules

184

End plates in steam space: Material

S

Thickness

15/32"

Pitch of stays

18 3/4"

How are stays secured

DN

Working pressure by rules

185

Material of stays

S

Diameter at smallest part

6-9"

Area supported by each stay

324"

Working pressure by rules

226

Material of Front plates at bottom

S

Thickness

1 1/16"

Lower back plate

S

Thickness

29/32"

Greatest pitch of stays

14 3/4 x 8 7/8"

Working pressure of plate by rules

230

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2"

Material of tube plates

S

Thickness: Front

1 1/16"

Back

27/32"

Mean pitch of stays

13 1/2"

Pitch across wide

Tubes spaces

14 1/4"

Working pressures by rules

184

Girders to Chamber tops: Material

Iron

Depth and thickness of

Girders at centre

9 x 1" (2)

Length as per rule

2-9"

Distance apart

9 1/2 x 10"

Number and pitch of Stays in each

3 at 7 7/16"

Working pressure by rules

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

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

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

Survey request form

1597 attached

DUNSMUIR &amp; JACKSON, Limited.

The foregoing is a correct description,

James F. H. Director.

Manufacturer.

Dates of Survey

During progress of

1914 July 29 Aug 3. 6. 13. 17. 24 Sep 10. 16. 21 Oct 2. 7. 13

While

During erection on

Building

board vessel - - -

Is the approved plan of boiler forwarded herewith

Yes

Total No. of visits

12

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

This boiler has been built under Special Survey in accordance with the approved plan & the workmanship & material are of good quality. This boiler will be shipped to Ardrossan at which port it will be fitted on board. This boiler has been securely fitted aboard and its safety valves adjusted under steam.

Survey Fee

When applied for, 191

Travelling expenses (if any) £

When received, 191

W. Gordon Muirhead

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

Committee's Minute

GLASGOW

29 DEC. 1914

Signed See accompanying machinery report.

Lloyd's Register

W1108-0195