

# REPORT ON BOILERS.

No. 9740

Date of writing Report

191

When handed in at Local Office

29-6-1927 Port of Belfast

Received at London Office

30 JUN 1927

No. in Survey held at Reg. Book.

Belfast

Date, First Survey 1<sup>st</sup> April

Last Survey 25<sup>th</sup> June 1927

on the

Tw. Sc. LA SALINA

(Number of Visits 10)

Master

Built at Belfast

By whom built Harland & Wolff Ltd. No 794

When built 1927

Engines made at Belfast

By whom made Harland & Wolff Ltd. No 794

When made 1927

Boilers made at Belfast

By whom made Harland & Wolff Ltd. No 794

When made 1927

Registered Horse Power

Owners Arveis Co Ltd.

Port belonging to London

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

(Letter for record S. 258) Total Heating Surface of Boilers 3702 sq ft

Is forced draft fitted No

No. and Description of

Boilers Two Single-Ended cylindrical

Working Pressure 180 lbs

Tested by hydraulic pressure to 320 lbs

Date of test 1.6.27

No. of Certificate 896

Can each boiler be worked separately Yes

Area of fire grate in each boiler 49 sq ft

No. and Description of

safety valves to each boiler Two Spring loaded

Area of each valve 9.62 sq in

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

Smallest distance between boilers or uptakes and bunkers or woodwork 22"

Inter Mean dia. of boilers 14'-0 1/2"

Length 10'-6"

Material of shell plates Steel

Thickness 1 5/32"

Range of tensile strength 28-32 tons Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams double

long. seams Kettle R.A.S.

Diameter of rivet holes in long. seams 1 1/4"

Pitch of rivets 8 3/8"

width of butt straps 18 3/8"

Per centages of strength of longitudinal joint rivets 97.5

plate 85.07

Working pressure of shell by

rules 180 lbs

Size of manhole in shell 16" x 12"

Size of compensating ring 36 x 32 x 1 1/8"

No. and Description of Furnaces in each

boiler Three Division

Material Steel

Rule

Outside diameter 40 1/2"

Length of plain part

Thickness of plates crown 17 1/2" bottom 3 1/2"

Description of longitudinal joint Weld

No. of strengthening rings

Working pressure of furnace by the rules 191

Combustion chamber

plates: Material Steel

Thickness: Sides 5/8"

Back 5/8"

Top 5/8"

Bottom 3/4"

Pitch of stays to ditto: Sides 8 1/2 x 8 1/2" Back 7 1/2 x 7 1/2"

Top 8 1/2 x 8" If stays are fitted with nuts or riveted heads nuts

Working pressure by rules 187 lbs

Material of stays Steel

Diameter at

smallest part 1 7/16"

Area supported by each stay 72.25 sq in

Working pressure by rules 210 lbs

End plates in steam space: Material Steel

Thickness 1 1/8"

Pitch of stays 1 7/2 x 20 1/2"

How are stays secured with washers

Working pressure by rules 184 lbs

Material of stays Steel

Diameter at smallest part 2 7/8"

Area supported by each stay 295 sq in

Working pressure by rules 242 lbs

Material of Front plates at bottom Steel

Thickness 3/8"

Material of

Lower back plate Steel

Thickness 1 3/16"

Greatest pitch of stays 13 1/2 x 7 1/2"

Working pressure of plate by rules 225 lbs

Diameter of tubes 3 1/2"

Pitch of tubes 4 1/2 x 4 3/8"

Material of tube plates Steel

Thickness: Front 7/8"

Back 1 1/16"

Mean pitch of stays 10.27"

water spaces 14 1/4"

Working pressures by rules front 188 lbs back 225 lbs

girders to Chamber tops: Material Steel

Depth and thickness of

girder at centre 8 1/4 - 1 1/2"

Length as per rule 30 5/8"

Distance apart 8 3/8"

Number and pitch of Stays in each Three 8"

Working pressure by rules 215 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

For HARLAND AND WOLFF, LIMITED, The foregoing is a correct description,

A. Marshall, Manufacturer.

Dates of Survey: During progress of work in shops 1927 April 1, 4, 6, 13, 20, May 9, 17, 20, 31; while building June 23 = 10

Is the approved plan of boiler forwarded herewith

Total No. of visits

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

These Boilers have been constructed under special survey. The materials and workmanship are sound and good. They have been satisfactorily tested by hydraulic pressure in accordance with the rules, efficiently installed and fastened on the vessel. The safety valves have been adjusted under steam. In my opinion the vessel is eligible for notation - L.M.C. 6.27

Survey Fee ... £

Travelling Expenses (if any) £

When applied for, 191

When received, 191

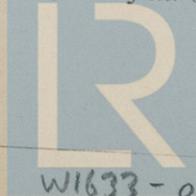
Committee's Minute

Assigned

JUL 1 1927

See 26 rpt. attached

R. Lee Amers. Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation

W1633-0172