

REPORT ON BOILERS.

No. 51480

Received at London Office 13 MAY 1931

Date of writing Report May 8th 1931 When handed in at Local Office May 8th 1931 Port of GLASGOW

No. in Survey held at Troon. Date, First Survey 12. 11. 30 Last Survey May 5th 1931
Reg. Book. (Number of Visits 34) Tons {Gross 1151
Net 556

on the SS. GUINNESS.
Master Built at Troon By whom built Ailsa S.B. Co Ltd Yard No. 414 When built 1931
Engines made at Troon By whom made Ailsa S.B. Co Ltd Engine No. 152 When made 1931
Boilers made at Greenock By whom made J. G. Kincaid & Co Ltd Boiler No. 202 When made 1931
Nominal Horse Power Owners A. Guinness, Son & Co Ltd Port belonging to London.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel (Letter for Record)

Total Heating Surface of Boilers Is forced draught fitted Coal or Oil fired

No. and Description of Boilers Working Pressure

Tested by hydraulic pressure to Date of test No. of Certificate Can each boiler be worked separately

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler One pair of 2" Improved High Lift Valves.

Area of each set of valves per boiler {per Rule 5.39
as fitted 6.28 Pressure to which they are adjusted 200 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 on uptakes and bunkers or woodwork 21" Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating Open floors Is the bottom of the boiler insulated Yes.

Largest internal dia. of boilers Length Shell plates: Material Tensile strength

Thickness Are the shell plates welded or flanged Description of riveting: circ. seams {end
inter.

long. seams Diameter of rivet holes in {circ. seams
long. seams Pitch of rivets {

Percentage of strength of circ. end seams {plate
rivets Percentage of strength of circ. intermediate seam {plate
rivets

Percentage of strength of longitudinal joint {plate
rivets Working pressure of shell by Rules

Thickness of butt straps {outer
inner No. and Description of Furnaces in each Boiler

Material Tensile strength Smallest outside diameter

Length of plain part {top
bottom Thickness of plates {crown
bottom Description of longitudinal joint

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules

End plates in steam space: Material Tensile strength Thickness Pitch of stays

How are stays secured Working pressure by Rules

Tube plates: Material {front
back Tensile strength Thickness {

Mean pitch of stay tubes in nests Pitch across wide water spaces Working pressure {front
back

Girders to combustion chamber tops: Material Tensile strength Depth and thickness of girder

at centre Length as per Rule Distance apart No. and pitch of stays

in each Working pressure by Rules Combustion chamber plates: Material

Tensile strength Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top Are stays fitted with nuts or riveted over

Working pressure by Rules Front plate at bottom: Material Tensile strength

Thickness Lower back plate: Material Tensile strength Thickness

Pitch of stays at wide water space Are stays fitted with nuts or riveted over

Working Pressure Main stays: Material Tensile strength

Diameter {At body of stay,
or
Over threads No. of threads per inch Area supported by each stay

Working pressure by Rules Screw stays: Material Tensile strength

Diameter {At turned off part,
or
Over threads No. of threads per inch Area supported by each stay

See Greenock Report No. 19304.

Working pressure by Rules Are the stays drilled at the outer ends Margin stays: Diameter { At turned off part, or Over threads

No. of threads per inch Area supported by each stay Working pressure by Rules

Tubes: Material External diameter { Plain Stay Thickness No. of threads per inch

Pitch of tubes Working pressure by Rules **Manhole compensation:** Size of opening in shell plate Section of compensating ring No. of rivets and diameter of rivet holes

Outer row rivet pitch at ends Depth of flange if manhole flanged **Steam Dome:** Material

Tensile strength Thickness of shell Description of longitudinal joint

Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets

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

The foregoing is a correct description, Manufacturer.

Dates of Survey { During progress of work in shops - - - while building { During erection on board vessel - - -

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

Total No. of visits

Is this Boiler a duplicate of a previous case If so, state Vessel's name and Report No.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *The boilers have been securely fitted on board and tried under steam with satisfactory results.*

Report No. 12

See remarks Report No. 12

9/5/31

Survey Fee £ : : When applied for, 10

Travelling Expenses (if any) £ : : When received, 10

D. C. Barr.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 12 MAY 1931**

Assigned **SEE ACCOMPANYING MACHINERY REPORT.**