

REPORT ON BOILERS.

No. 11382

15 OCT 1934

Received at London Office

of writing Report 19 When handed in at Local Office 13/10/1934 Port of Belfast
 visits included in T. & S. machinery
 Survey held at Belfast Date, First Survey Last Survey 19
 Book.
 on the Steel Twin Sc "ASTURIAS" (Number of Visits) Gross Tons Net
 at Belfast By whom built Harland & Wolff Ltd. Yard No. 567 When built 1925
 nes made at Belfast By whom made Harland & Wolff Ltd. Engine No. 5010 When made 1934
 rs made at Annan By whom made Cochran & Co. Annan Ltd. Boiler No. 9521/2 When made 1925
 ers Royal Mail Lines Ltd. Port belonging to Belfast

RTICAL DONKEY BOILERS

at Annan By whom made Cochran & Co. Annan Ltd Boiler No. 9521/2 When made 1925 Where fixed Aux Motor room
 ufacturers of Steel
 Heating Surface of Boiler 600 sq ft each Is forced draught fitted no Coal or Oil fired oil
 and Description of Boilers Two vertical multitubular Working pressure 100 lbs
 ed by hydraulic pressure to - Date of test - No. of Certificate -
 of Firegrate in each Boiler - No. and Description of safety valves to each boiler Two Spring-loaded
 of each set of valves per boiler { per rule 7.80" Pressure to which they are adjusted 100 lbs Are they fitted with easing gear Yes
 as fitted 9.80"
 whether steam from main boilers can enter the donkey boiler no Smallest distance between boiler or uptake and bunkers
 odwork Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating
 Is the base of the boiler insulated Largest internal dia. of boiler 70" Height 17'0"
 plates: Material Steel Tensile strength 26-30 tons Thickness 1"
 he shell plates welded or flanged no Description of riveting: circ. seams { end single double
 inter. single long. seams double
 of rivet holes in { circ. seams 27/32" Pitch of rivets { 26.5 Percentage of strength of circ. seams { plate 69.1
 long. seams 27/32" { 24.5 { rivets 43.2 of Longitudinal joint { rivets 65.25
 { combined 70.9
 ing pressure of shell by rules 105 lbs Thickness of butt straps { outer -
 inner -
 Crown: Whether complete hemisphere, dished partial spherical, or flat hemisphere Material Steel
 le strength 26/30 tons Thickness 7/8" + 7/16" Radius 42" Working pressure by rules 105 lbs
 ription of Furnace: Plain, spherical, or dished crown spherical Material Steel Tensile strength 26/30 tons
 ness 17/32" External diameter { top - Length as per rule - Working pressure by rules -
 bottom -
 of support stays circumferentially - and vertically - Are stays fitted with nuts or riveted over -
 eter of stays over thread - Radius of spherical or dished furnace crown 36" Working pressure by rule 122 lbs
 ness of Ogee Ring 7/8" Diameter as per rule { D 7.5" Working pressure by rule 101 lbs
 d 6.0"
 ustion Chamber: Material Steel Tensile strength 26/30 tons Thickness of top plate 3/4"
 s if dished - Working pressure by rule - Thickness of back plate - Diameter if circular -
 h as per rule - Pitch of stays - Are stays fitted with nuts or riveted over -
 eter of stays over thread - Working pressure of back plate by rules -
 Plates: Material { front Steel Tensile strength { 26/30 tons Thickness { 3/4" Mean pitch of stay tubes in nests 13 1/2"
 back Steel
 rprising shell, Dia. as per rule { front - Pitch in outer vertical rows { - Dia. of tube holes FRONT { stay 2 1/2" BACK { stay 2 1/2"
 back - { plain 2 1/2" { plain 2 1/2"
 alternate tube in outer vertical rows a stay tube yes Working pressure by rules { front 153 lbs
 back 110 lbs
 s to combustion chamber tops: Material Steel Tensile strength 26/32 tons
 and thickness of girder at centre gusset Plate 7/8" thick 11 1/2" throat Length as per rule -
 ce apart - No. and pitch of stays in each - Working pressure by rule -

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Crown 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 ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒

Tubes: Material ☒ External diameter { plain $2\frac{1}{2}"$ stay $2\frac{1}{2}"$ Thickness { No. 11 L.S.G. $\frac{11}{32}"$ $\frac{11}{32}"$

No. of threads per inch nine Pitch of tubes $3\frac{3}{4} \times 4"$ Working pressure by rules Plain 125 lb Stay 120

Manhole Compensation: Size of opening in shell plate $16 \times 12"$ Section of compensating ring $28" \text{ dia} \times \frac{1}{2}" \text{ thick}$ No. of rivets and depth of flange if manhole flanged ☒

of rivet holes $36 - \frac{27}{32}"$ Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged ☒

Uptake: External diameter ☒ Thickness of uptake plate ☒

Cross Tubes: No. ☒ External diameters { ☒ Thickness of plates ☒

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with ☒

The foregoing is a correct description, ☒

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

Is the approved plan of boiler forwarded herewith (If not state date of approval.)

Total No. of visits

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

These Boilers have been examined internally and externally. The scabbings have been checked with the approved drawings. The mountings, doors & fastenings were examined. The oil fuel pressure lines were tested. The safety valves were adjusted under steam. The accumulation did not exceed. In my opinion the boilers are now in good order and eligible for class subject to annual

Survey Fee ... £ : : When applied for, 19
Travelling Expenses (if any) £ : : When received, 19

Committee's Minute

TUE. 16 OCT 1934

Assigned

see J. E. Machy

R. E. Amess

Engineer Surveyor to Lloyd's Register of Shipping



Lloyd's Register Foundation