

REPORT ON BOILERS.

No. 16454

Received at London Office - 6 OCT. 1926

Date of writing Report 1st Oct 1926 When handed in at Local Office 4th Oct. 1926 Port of WEST HARTLEPOOL

No. in Survey held at Hartlepool Date, First Survey 16th April Last Survey 2nd Oct. 1926

on the S.S. "TALANG AKAR" (Number of Visits See entry) Tons { Gross _____ Net _____

Master _____ Built at Middlesbro. By whom built Furness S. B. Co. & Co. Yard No. 107 When built 1926

Engines made at Hartlepool By whom made Richardsons Westgarth & Co. Ltd. Engine No. 2658 When made 1926

Boilers made at ditto By whom made ditto Boiler No. 2658 When made 1926

Nominal Horse Power _____ Owners _____ Port belonging to _____

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel D. Colville & Sons Ltd (Letter for Record S)

Total Heating Surface of Boilers 3649 sq. ft. Is forced draught fitted yes Coal or Oil fired oil

No. and Description of Boilers Two single ended Working Pressure 180 lbs

Tested by hydraulic pressure to 320 lbs Date of test 22.7.26 No. of Certificate 3687 Can each boiler be worked separately yes

Area of Firegrate in each Boiler oil burning No. and Description of safety valves to each boiler 2 direct spring

Area of each set of valves per boiler { per Rule 14.04 as fitted 16.58 } Pressure to which they are adjusted 185 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 or uptakes and bunkers or woodwork no side bunkers Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating _____ Is the bottom of the boiler insulated _____

Largest internal dia. of boilers 13'-0" Length 11'-6" Shell plates: Material Steel Tensile strength 28 1/2 / 32.5

Thickness 1 1/16" Are the shell plates welded or flanged no Description of riveting: circ. seams { end D. Riv lap inter. _____ } long. seams _____

Long. seams D.R. D.B.S. Diameter of rivet holes in { circ. seams 1 1/16" long. seams 1 1/16" } Pitch of rivets { 3 1/8" 7 1/4" }

Percentage of strength of circ. end seams { plate 66.0 rivets 56.3 of end. } Percentage of strength of circ. intermediate seam { plate _____ rivets _____ }

Percentage of strength of longitudinal joint { plate 85.35 rivets 87 combined 88.2 } Working pressure of shell by Rules 181

Thickness of butt straps { outer 1 3/16" inner 1 5/16" } No. and Description of Furnaces in each Boiler 2 Deightons

Material Steel Tensile strength 26/30 Smallest outside diameter 47 1/16"

Length of plain part { top _____ bottom _____ } Thickness of plates { crown 1 1/8" bottom 3/32" } Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom _____ Working pressure of furnace by Rules 182

End plates in steam space: Material Steel Tensile strength 26/30 Thickness 1 1/16" Pitch of stays 16 1/4" x 16 3/4"

How are stays secured Double nuts Working pressure by Rules 191

Tube plates: Material { front Steel back Steel } Tensile strength { 26/30 } Thickness { 5/8" 3/4" }

Mean pitch of stay tubes in nests 9 3/8" Pitch across wide water spaces 13 1/2" x 7 1/2" Working pressure { front 192 back 226 }

Girders to combustion chamber tops: Material Steel Tensile strength 28 1/2 / 32 1/2 Depth and thickness of girder

at centre 7 1/2" x 1 3/4" Length as per Rule 31 1/4" Distance apart 8 1/4" No. and pitch of stays

in each 3 7 1/4" Working pressure by Rules 189 Combustion chamber plates: Material Steel

Tensile strength 26/30 Thickness: Sides 23/32" Back 19/32" Top 9/16" Bottom 23/32"

Pitch of stays to ditto: Sides 8" x 10" Back 8" x 8 3/8" Top 8 1/2" x 7 1/4" Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 780 Front plate at bottom: Material Steel Tensile strength 26/30

Thickness 5/8" Lower back plate: Material Steel Tensile strength 26/32 Thickness 13/16"

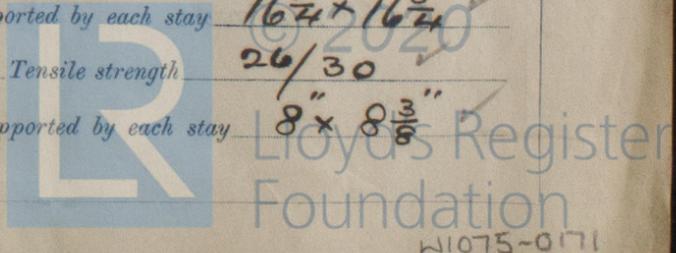
Pitch of stays at wide water space 13" x 8 3/8" Are stays fitted with nuts or riveted over nuts

Working Pressure 224 Main stays: Material Steel Tensile strength 28/32

Diameter { At body of stay, or Over threads 2 5/8" } No. of threads per inch 6 Area supported by each stay 16 1/4" x 16 3/4"

Working pressure by Rules 182 Screw stays: Material Steel Tensile strength 26/30

Diameter { At turned off part, or Over threads 1 1/2" } No. of threads per inch 9 Area supported by each stay 8" x 8 3/8"



Working pressure by Rules 184 Are the stays drilled at the outer ends no ✓ Margin stays: Diameter ^{At turned off part, ✓} _{or} 1 5/8 ✓
 No. of threads per inch 9 ✓ Area supported by each stay 8 3/8 x 10 1/6 Working pressure by Rules 180
 Tubes: Material Iron ✓ External diameter ^{Plain} 2 1/2 ✓ ^{Stay} 2 1/2 ✓ Thickness 9 WG ✓ 5/16 3/8 1/2 ✓ No. of threads per inch 9 ✓
 Pitch of tubes 3 3/4 x 3 3/4 ✓ Working pressure by Rules 200 Manhole compensation: Size of opening in shell plate 13 x 16 1/2 ✓ Section of compensating ring 10 7/8 x 1 1/6 No. of rivets and diameter of rivet holes 34 1 1/16 ✓
 Outer row rivet pitch at ends 7 1/4 ✓ Depth of flange if manhole flanged ✓ Steam Dome: Material none ✓
 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 none 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 _____ 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 23 inclusive for boilers been complied with yes ✓

The foregoing is a correct description,
 For ADDONS, WESTGAERTH & Co. LIMITED Manufacturer.
R. D. Shilton

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

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

Survey Fee £ See Machinery report When applied for, 192
 Travelling Expenses (if any) £ See Machinery report When received, 192

R. D. Shilton
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRL 8 OCT 1926

Assigned see Minute on Npl. 7. E. Rpt 16434

