

REPORT ON BOILERS.

No. 45580.

Received at London Office 18 MAR 1935

Date of writing Report 10 When handed in at Local Office 1 MAR 1935 Port of HULL

No. in Survey held at Reg. Book. Hull Date, First Survey 23rd Nov. 1934 Last Survey 13th March 1935

on the Steel Sc K " Kingston Beylomite" (Number of Visits ✓) Tons {Gross 447.95 Net 173.87.

Master Built at Beverley By whom built Cook, Welton & Gemmell Ltd. No. 600 When built 1935,3

Engines made at Hull By whom made Charles D. Holmes & Co. Ltd. Engine No. 1473 When made 1935

Boilers made at Hull By whom made Charles D. Holmes & Co. Ltd. Boiler No. 1473 When made 1935

Nominal Horse Power 117 Owners Kingston Steam Trawling Co. Ltd. Port belonging to Hull.

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Appleby - Frodingham Steel Co. Ltd. (Letter for Record "S")

Total Heating Surface of Boilers 1940 sq. ft. Is forced draught fitted No. Coal or Oil fired coal

No. and Description of Boilers One single Ended Return Tube. Working Pressure 215#

Tested by hydraulic pressure to 373# Date of test 24-1-35 No. of Certificate 3909. Can each boiler be worked separately ✓

Area of Firegrate in each Boiler 53.7 sq. ft. No. and Description of safety valves to each boiler 2 Spring loaded.

Area of each set of valves per boiler {per Rule 10.55 sq. ft. as fitted 11.88. Pressure to which they are adjusted 215# 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 9" Is oil fuel carried in the double bottom under boilers ✓

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

Largest internal dia. of boilers 174" Length 10' 8" Shell plates: Material Steel Tensile strength 29-33 tons

Thickness 1 3/8" Are the shell plates welded or flanged ✓ Description of riveting: circ. seams {end 8R inter. 3 3/4"

long. seams T.R. S.S.S. Diameter of rivet holes in {circ. seams 1 3/8" long. seams } Pitch of rivets { 9 1/4"

Percentage of strength of circ. end seams {plate 63.20 rivets 72.40 Percentage of strength of circ. intermediate seam {plate rivets

Percentage of strength of longitudinal joint {plate 85.13 rivets 86.80 combined 87.60 Working pressure of shell by Rules 217#

Thickness of butt straps {outer 1 1/16" inner 1 3/16" No. and Description of Furnaces in each Boiler Three plain ✓

Material Steel Tensile strength 26-30 tons Smallest outside diameter 42.5"

Length of plain part {top 42" bottom ✓ Thickness of plates {crown 53/64" bottom } Description of longitudinal joint welded.

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 221#

End plates in steam space: Material Steel Tensile strength 26-30 tons Thickness 1 7/32" Pitch of stays 19 3/4" x 18 1/4"

How are stays secured Double nuts and washers ✓ Working pressure by Rules 221#

Tube plates: Material {front Steel back " Tensile strength { 26-30 tons Thickness { 15/16" 7/8"

Mean pitch of stay tubes in nests 10.7" Pitch across wide water spaces 14" Working pressure {front 228# back 222#

Girders to combustion chamber tops: Material Steel Tensile strength 29-33 tons Depth and thickness of girder

at centre 10 x 1 3/4" Length as per Rule 36 7/32" Distance apart 9" x 9 1/2" Centre No. and pitch of stays

in each 3 @ 8" Working pressure by Rules 215# Combustion chamber plates: Material Steel

Tensile strength 26-30 tons Thickness: Sides 3/4" Back 23/32" Top 23/32" Bottom 3/4"

Pitch of stays to ditto: Sides 9 1/2" x 8 1/2" Back 9 3/8" x 8 1/4" Top 9 1/2" x 8" max Are stays fitted with nuts or riveted over nuts ✓

Working pressure by Rules (min) 232# Front plate at bottom: Material Steel Tensile strength 26-30 tons

Thickness 15/16" Lower back plate: Material Steel Tensile strength 26-30 tons Thickness 7/8"

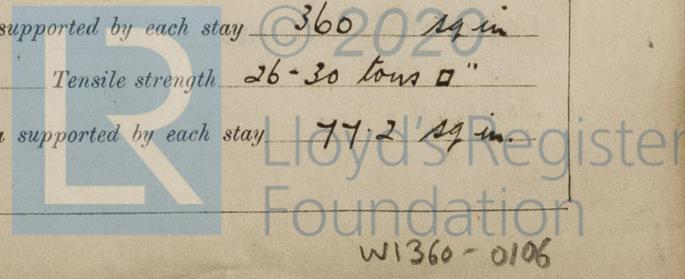
Pitch of stays at wide water space 14.25" Are stays fitted with nuts or riveted over nuts ✓

Working Pressure 230# Main stays: Material Steel Tensile strength 28-32 tons

Diameter {At body of stay, or Over threads } 3 1/4" No. of threads per inch 8 Area supported by each stay 360 sq. in.

Working pressure by Rules 223# Screw stays: Material Steel Tensile strength 26-30 tons

Diameter {At turned off part, or Over threads } 1 3/4" + 1 7/8" No. of threads per inch 10 Area supported by each stay 77.2 sq. in.



Working pressure by Rules 232 #0 Are the stays drilled at the outer ends No Margin stays: Diameter At turned off part, Over threads 2" + 1 7/8"
 No. of threads per inch 10 Area supported by each stay 89 sq inches Working pressure by Rules 240 #0
 Tubes: Material Iron External diameter Plain } 3 1/2" Thickness 8 wg } 5/16" + 3/8" + 7/16" No. of threads per inch 9
 Pitch of tubes 4 3/4" Working pressure by Rules 215 #0 Manhole compensation: Size of opening in shell plate 16" x 12" Section of compensating ring 57 1/2" dia x 1 3/8" No. of rivets and diameter of rivet holes 59 @ 1 3/8"
 Outer row rivet pitch at ends 10.41" Depth of flange if manhole flanged Steam Dome: Material Steel
 Tensile strength 26.30 tons 0" Thickness of shell 3/4" Description of longitudinal joint J.R. lap
 Diameter of rivet holes 1 1/32" Pitch of rivets 2 1/4" Percentage of strength of joint Plate 54.00 Rivets 43.80
 Internal diameter 33" Working pressure by Rules 229 #0 Thickness of crown 7/8" No. and diameter of stays 2 @ 2 1/4" Inner radius of crown Working pressure by Rules
 How connected to shell Riveted Size of doubling plate under dome 57 1/2" x 1 3/8" Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 1 3/8" @ 10.4"

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 Yes.

The foregoing is a correct description,
 For CHARLES D. HOLMES & CO., LTD. Manufacturer.
J. C. [Signature]

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 No. (If not state date of approval.)
 See mech Rpt. Total No. of visits ✓

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. "Kingston Chrysolite 45543"

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey and in accordance with the approved plan. It has been satisfactorily fitted on board, tried under steam and its safety valves adjusted as stated.

The approved boiler plan is retained for dealing with duplicate boilers 1474 and 5.

Charged on engine report Herewith.

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

C. Knuffatt.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 19 MAR 1935

Assigned See Sub JE. 45380

