

REPORT ON BOILERS.

No. 51000

Date of writing Report 4-11-1930 When handed in at Local Office 15-11-1930 Port of Glasgow
No. in Reg. Book. Glasgow Date, First Survey 21-11-29 Last Survey 18-11-1930
(Number of Visits 65) Tons { Gross 6370
Net 3830
on the M.V. 'NORFOLD'
Master Glasgow Built at Glasgow By whom built Barclay Curle & Co Yard No. 642 When built 1930
Engines made at Glasgow By whom made Barclay Curle & Co Engine No. 642 When made 1930
Boilers made at Glasgow By whom made Barclay Curle & Co Boiler No. 642 When made 1930
Nominal Horse Power _____ Owners _____ Port belonging to _____

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY, OR~~ DONKEY.

Manufacturers of Steel D Colville Ltd & J Dunlop Ltd, W Beardmore Ltd (Letter for Record (3))
Total Heating Surface of Boilers 1435 sq ft Is forced draught fitted no Coal or Oil fired oil
No. and Description of Boilers 1 SB Working Pressure 120 lb
Tested by hydraulic pressure to 230 lb Date of test 16-5-30 No. of Certificate 18429 Can each boiler be worked separately ✓
Area of Firegrate in each Boiler 34.5 sq ft No. and Description of safety valves to each boiler 2 Spring Loaded (H.L.)
Area of each set of valves per boiler { per Rule 4.96 sq ft Pressure to which they are adjusted 120 lb 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 well clear Is oil fuel carried in the double bottom under boilers ✓
Smallest distance between shell of boiler and tank top plating Blk on upper flat. Is the bottom of the boiler insulated yes
Largest internal dia. of boilers 12'-0" Length 11'-0" Shell plates: Material Steel Tensile strength 29/33 Tons
Thickness 2 1/32" Are the shell plates welded or flanged no Description of riveting: { end D.R.
inter. 3.025"
long. seams T.R.-D.B.S. Diameter of rivet holes in { circ. seams 15/16" Pitch of rivets { 5.5625"
long. seams 3/4"
Percentage of strength of circ. end seams { plate 69.04 Percentage of strength of circ. intermediate seam { plate ✓
rivets 55.08 rivets ✓
Percentage of strength of longitudinal joint { plate 86.51 Working pressure of shell by Rules 120. lb
rivets 89.82 combined 90.98
Thickness of butt straps { outer 17/32" No. and Description of Furnaces in each Boiler 2 Brighton Section
inner 2 1/32" Tensile strength 26/30 Tons Smallest outside diameter 3'-5 3/4"
Material Steel Thickness of plates { crown 3/8" Description of longitudinal joint weld
bottom ✓ Working pressure of furnace by Rules 127. lb
Dimensions of stiffening rings on furnace or c.c. bottom ✓ Thickness 7/8" Pitch of stays 14" x 16 1/4"
End plates in steam space: Material Steel Tensile strength 26/30 Tons Working pressure by Rules 126. lb
How are stays secured D.N. Thickness { 23/32"
Tube plates: Material { front Steel Tensile strength { 26/30 Tons Thickness { 5/8"
back Steel Working pressure { front 130 lb
Mean pitch of stay tubes in nests 10.6" Pitch across wide water spaces 14" back 121 lb
Girders to combustion chamber tops: Material Steel Tensile strength 28-32 Tons Depth and thickness of girder
at centre 8" x 9 1/16" double Length as per Rule 2'-8 25/32" Distance apart 9" No. and pitch of stays
in each 2 @ 10" Working pressure by Rules 127. lb Combustion chamber plates: Material Steel
Tensile strength 26-30 Tons Thickness: Sides 19/32" Back 19/32" Top 19/32" Bottom 19/32"
Pitch of stays to ditto: Sides 10" x 10" Back 10 1/2" x 9 1/2" Top 10" x 9" Are stays fitted with nuts or riveted over nuts
Working pressure by Rules 120 lb Front plate at bottom: Material Steel Tensile strength 26-30 Tons
Thickness 23/32" Lower back plate: Material Steel Tensile strength 26-30 Tons Thickness 1 1/16"
Pitch of stays at wide water space 14 1/4" Are stays fitted with nuts or riveted over nuts
Working Pressure 129 lb Main stays: Material Steel Tensile strength 28-32 Tons
Diameter { At body of stay, 2 1/4" No. of threads per inch 6 Area supported by each stay 276 sq in
Over threads 125 lb Screw stays: Material Steel Tensile strength 26-30 Tons
Working pressure by Rules 125 lb No. of threads per inch 9 Area supported by each stay 100 sq in
Diameter { At turned off part, 1 1/2" Over threads

Working pressure by Rules 125 lb Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, 1 7/8" or Over threads 129 lb
No. of threads per inch 9 Area supported by each stay 1140 sq in Working pressure by Rules 10 w f
Tubes: Material Iron External diameter { Plain 3" Thickness 5/16" - 3/8" No. of threads per inch 9
Pitch of tubes 4 1/4" x 4 1/4" Working pressure by Rules 140 lb Manhole compensation: Size of opening in
shell plate 20 1/4" x 16 1/4" Section of compensating ring 24" x 2 1/32" No. of rivets and diameter of rivet holes 44 - 1"
Outer row rivet pitch at ends 7 3/4" Depth of flange if manhole flanged 4" 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

Number of elements Material of tubes Manufacturers of { Tubes Steel castings 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

FOR BARCLAY, CURLE & CO., LTD

The foregoing is a correct description,

Manufacturer.

Dates { During progress of work in shops - - See
while building { During erection on board vessel - - Accompanying Rpt:
Machinery

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) 18/11/29 yes

Total No. of visits 65

Is this Boiler a duplicate of a previous case yes

If so, state Vessel's name and Report No.

MV Alcides - Gb Rpt 50475

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

This boiler has been built under Special Survey, to approved plans in accordance with the Society's Rules. Materials and workmanship are good. It has been properly fitted on board the vessel, and the safety-valves adjusted under steam to 120 lb.

Survey Fee ...

When applied for,

19

Travelling Expenses (if any) £

When received,

19

H. Sutherland

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 18 NOV 1930

Assigned See accompanying machy report



© 2021

Lloyd's Register Foundation