

REPORT ON BOILERS.

No. 7058

Received at London Office TUE 6-AUG 1918

When handed in at Local Office at 1st Aug 1918 Port of NEWCASTLE-ON-TYNE

Survey held at Hellum on Tyne Date, First Survey 29th Jan 1918 Last Survey 31st July 1918
(Number of Visits 22) Gross Tons 209 Net Tons 79

On the S. S. Onward Built at Selby By whom built Cochrane & Sons When built 1905

made at Hull By whom made C. D. Holmes & Co When made 1905

made at Hellum on Tyne By whom made Palmer's Co Ltd When made 1918

rated Horse Power 60 Owners Forward Steam Towing Co Ltd Port belonging to Grimby

WATER TUBULAR BOILERS—MAIN, ~~FURNACE OR DONKEY~~—Manufacturers of Steel Spencer & Sons Ltd

For record 5 Total Heating Surface of Boilers 1155 sq ft Is forced draft filled No. and Description of One Single Ended

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 21/6/18

Certificate 9110 Can each boiler be worked separately Yes Area of fire grate in each boiler 33 1/2 sq ft No. and Description of 2 Direct Spring

Area of each valve several filled Pressure to which they are adjusted 180 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

Distance between boilers or uptakes and bunkers or woodwork 9" Internal Mean dia. of boilers 12-0 Length 10-0

Material of shell plates Steel Thickness 1/32" Range of tensile strength 25/32 tons Are the shell plates welded or flanged No

Method of riveting: cir. seams 2 R Lap long. seams 5 rivets Diameter of rivet holes in long. seams 1/16" Pitch of rivets 7/8"

Width of butt straps 16" Per centages of strength of longitudinal joint rivets 88.5% Working pressure of shell by 85.3%

Size of manhole in shell 16" x 12" Size of compensating ring 7" x 1/32" No. and Description of Furnaces in each No plain

Material Steel Outside diameter 42" Length of plain part 5-11" Thickness of plates crown 25/32" bottom 5-5"

Method of longitudinal joint Welded No. of strengthening rings Yes Working pressure of furnace by the rules 187 Combustion chamber

Material Steel Thickness: Sides 5/8" Back 2 1/2" Top 5/8" Bottom 15/16" Pitch of stays to ditto: Sides 8 3/4" x 8 3/8" Back 8 3/4" x 8 3/8"

Are stays fitted with nuts or riveted heads Nuts Working pressure by rules 188 Material of stays Steel Diameter at 1 1/8"

Area supported by each stay 75 1/2 sq in Working pressure by rules 183 End plates in steam space: Material Steel Thickness 1/16"

How are stays secured Double nuts Working pressure by rules 186 Material of stays Steel Diameter at smallest part 5-05"

Supported by each stay 273 sq in Working pressure by rules 192 Material of Front plates at bottom Steel Thickness 1" Material of

back plate Steel Thickness 15/16" Greatest pitch of stays 13" x 8 5/8" Working pressure of plate by rules 264 Diameter of tubes 3 1/2"

Material of tube plates Steel Thickness: Front 1" Back 3/4" Mean pitch of stays 9 3/4" Pitch across wide

spaces 14" Working pressures by rules 183 lbs Girders to Chamber tops: Material Steel Depth and thickness of

at centre 8 1/2" x 1 5/8" Length as per rule 32 7/16" Distance apart 8 1/2" Number and pitch of Stays in each No 8 1/2"

Working pressure by rules 182 lbs Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked

separately

Are they fitted with easing gear

The foregoing is a correct description, A. Cameron per [Signature] Manufacturer.

Is the approved plan of boiler forwarded herewith Yes and steel test immues

Total No. of visits 22

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under special survey, the materials & workmanship are of good quality. It is to be forwarded to Grimby to be fitted on board the S. S. Onward.

Survey Fee ... £ 3 : 17 : When applied for, 2 - AUG 1918

Travelling Expenses (if any) £ ✓ : When received, 27 Nov 1918

Signature: George Murdoch Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

Signature

FRI. 3 - JAN. 1919

