

REPORT ON BOILERS.

No. 52250.

Received at London Office

13 DEC 1943

Date of writing Report 12-11-1943. When handed in at Local Office 10 DEC 1943. Port of HULL

No. in Reg. Book. Survey held at HULL Date, First Survey 18. 8. 43. Last Survey 3. 12. 1943.

on the H.M. TRAWLER. MEWSTONE. (Number of Visits 21.) Gross 452 Tons Net 144

Built at BEVERLEY By whom built Cook Welford & Gammell & Co. Yard No. 721 When built 1943

Engines made at HULL By whom made Chas. D. Holmes & Co. Engine No. 1661 When made

Boilers made at HULL By whom made Chas. D. Holmes & Co. Boiler No. 1661 When made

Nominal Horse Power 156 Owners THE ADMIRALTY Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Steel Company of Scotland (Letter for Record S.)

Total Heating Surface of Boilers 2650 sq. ft. Is forced draught fitted Yes. Coal or Oil fired Coal.

No. and Description of Boilers One S.B. Working Pressure 200 lb./sq. in.

Tested by hydraulic pressure to 350 lb./sq. in. Date of test 30-9-43. No. of Certificate 4204. Can each boiler be worked separately

Area of Firegrate in each Boiler 63 sq. ft. No. and Description of safety valves to each boiler 2 spring loaded

Area of each set of valves per boiler {per Rule 15-40" as fitted 16-60" Pressure to which they are adjusted 200 lb./sq. in. 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 2'-0" Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating None Is the bottom of the boiler insulated No

Largest internal dia. of boilers 14'-9 3/8" Length 11'-6" Shell plates: Material Steel Tensile strength 29/32 tons/sq. in.

Thickness 1 5/16" Are the shell plates welded or flanged No Description of riveting: circ. seams {end DR. lap inter. None

long. seams T.R.-D.B.S. Diameter of rivet holes in {circ. seams 1 3/8" long. seams 1 3/8" Pitch of rivets { 9 1/2"

Percentage of strength of circ. end seams {plate 65.6% rivets 44.7% Percentage of strength of circ. intermediate seam {plate rivets

Percentage of strength of longitudinal joint {plate 85.5% rivets 88.5% combined 88.8%

Thickness of butt straps {outer 1" inner 1 1/8" No. and Description of Furnaces in each Boiler 3-Cf Deighton Section.

Material Steel Tensile strength 26/30 tons/sq. in. Smallest outside diameter 3'-6 7/16"

Length of plain part {top bottom Thickness of plates {crown 19/32" bottom 19/32" Description of longitudinal joint Weld

Dimensions of stiffening rings on furnace or c.e. bottom

End plates in steam space: Material Steel Tensile strength 26/30 tons/sq. in. Thickness 1 1/32" Pitch of stays 2 1/2 x 20" max

How are stays secured Nuts inside and out

Tube plates: Material {front Steel Tensile strength 26/30 tons/sq. in. Thickness 7/8" back Steel do 25/32"

Mean pitch of stay tubes in nests 9 1/16" Pitch across wide water spaces 13 5/8"

Girders to combustion chamber tops: Material Steel Tensile strength 28/32 tons/sq. in. Depth and thickness of girder

at centre 8 1/4" x 1 7/8" Length as per Rule 2'-4 5/32" Distance apart 10 3/4" No. and pitch of stays

in each 2-9 7/8" Combustion chamber plates: Material Steel

Tensile strength 26/30 tons/sq. in. Thickness: Sides 25/32" Back 3/4" Top 25/32" Bottom 25/32"

Pitch of stays to ditto: Sides 10 3/4" x 9 7/8" Back 9 1/4" x 9 7/8" Top 10 1/4" x 9 7/8" Are stays fitted with nuts or riveted over Nuts

Front plate at bottom: Material Steel Tensile strength 26/30 tons/sq. in.

Thickness 7/8" Lower back plate: Material Steel Tensile strength 26/30 tons/sq. in. Thickness 7/8"

Pitch of stays at wide water space 14 1/2" x 9 7/8" Are stays fitted with nuts or riveted over Nuts

Main stays: Material Steel Tensile strength 28/32 tons/sq. in.

Diameter {At body of stay, or Over threads 3 1/8" No. of threads per inch 6

Screw stays: Material Steel Tensile strength 26/30 tons/sq. in.

Diameter {At turned off part, or Over threads 1 7/8" No. of threads per inch 9

Are the stays drilled at the outer ends No. Margin stays: Diameter { At turned off part, 2" or Over threads

No. of threads per inch 9

Tubes: Material Steel External diameter { Plain 2 3/4" Stay 2 1/4" Thickness { 8.W.G. 5/16" 3/8" No. of threads per inch 9

Pitch of tubes 3 7/8" x 3 7/8" Manhole compensation: Size of opening in shell plate 12" (x 16") Section of compensating ring 1 5/16" x 20" No. of rivets and diameter of rivet holes 15 - 1 5/32"

Outer row rivet pitch at ends 10 1/8" Depth of flange if manhole flanged 3 1/4" 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 Thickness of crown No. and diameter of stays Inner radius of crown

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 forgings Steel castings Internal diameter and thickness of tubes

Number of elements Material of tubes 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

Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes forgings and 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.
W.R. Evans Manufacturer.

Dates of Survey { During progress of work in shops - - 1943 Aug 18 - Sept 3 30 Are the approved plans of boiler and superheater forwarded herewith 15-2-43 (If not state date of approval.)

while building { During erection on board vessel - - - See machinery report. Total No. of visits 21

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. HMT BRECH HULL Rpt. No. 50642

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

This boiler has been constructed under Special Survey in accordance with the approved plans & the Rules. The workmanship and materials are good and when subjected to a hydraulic test of 350 lbs/sq" it was found satisfactory in every respect.

The above boiler installed in HMT "MEWSTONE" at Hull, examined under steam, safety valves adjusted so overleaf, accumulation test held, and on completion of all trials found satisfactory in every respect. W.S. Shields

Survey Fee £ : : When applied for, 19

Travelling Expenses (if any) £ : : When received, 19

J. Fildes
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned see minute on 18. Rpt.