

REPORT ON BOILERS.

No. 423.

Received at London Office 16 SEP 1930

Date of writing Report 11th Sept. 1930, When handed in at Local Office Trieste 25.11. 1930 Port of SheffieldNo. in Survey held at Sheffield Date, First Survey 20/6/30 Last Survey 11th Sept. 1930
Reg. Book Trieste 5.11.30
1057 on the J. A. Mowinckel (Number of Visits 5.25) Gross 12323
Tons Net 6971Built at Monfalcone By whom built Cantiere Navale Yard No. 236 When built 1930
Engines made at Turin By whom made Fiat Fab. Grandi Motori Engine No. 1709 When made 1930
Boilers made at Sheffield By whom made Messrs Davy Bros Ltd Boiler No. 2943/4 When made 1930
Under Messrs Clarkson Thimble Tube Boiler Co. Ltd. Cow. No. 410-411 Port belonging to Danzig

VERTICAL DONKEY BOILER.

Made at Sheffield By whom made Davy Bros Ltd Boiler No. 2943/2944 When made 1930 Where fixed above
Manufacturers of Steel Messrs The Parkgate Iron & Steel Co. Ltd cylinders

Total Heating Surface of Boiler 270 sq. ft. each Is forced draught fitted ✓ Coal or Oil fired Oil

No. and Description of Boilers 2. Clarksons Thimble Tube. Working pressure 100 LBS

Tested by hydraulic pressure to 200 LBS Date of test 11th Sept. 1930 No. of Certificate 523 & 524

Area of Firegrate in each Boiler ✓ No. and Description of safety valves to each boiler One 2" double spring Marine

Area of each set of valves per boiler { per rule 3.510
as fitted 6.282 Pressure to which they are adjusted 100 lbs Are they fitted with easing gear ✓

State whether steam from main boilers can enter the donkey boiler ✓ no Smallest distance between boiler or uptake and bunkers

Is oil fuel carried in the double bottom under boiler ✓ Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated ✓ yes Largest internal dia. of boiler 5'-0" Height 9'-3 1/8"

Shell plates: Material Steel Tensile strength 28/32 Thickness 7/16

Are the shell plates welded or flanged no Description of riveting: circ. seams Top S.R. Lap
Bot. D.R. Lap
inter. S.R. Lap long. seams D.R. LapDia. of rivet holes in { circ. seams 13/16 Pitch of rivets 1 1/8
long. seams 13/16 2.63 Percentage of strength of circ. seams { plate 56
rivets 51 of Longitudinal joint { plate 69
rivets 74
combined 75Working pressure of shell by rules 133 LBS Thickness of butt straps { outer —
inner —

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat Dished Material Steel

Tensile strength 26/30 Thickness 9/16 Radius 4'-6" Working pressure by rules 122 LBS

Description of Furnace: Plain, spherical, or dished crown Dished Material Steel Tensile strength 26/30

Thickness 13/16 External diameter { top 4'-1 7/8 Length as per rule 4'-6 1/4 Working pressure by rules 125 LBS
bottom "

Pitch of support stays circumferentially none and vertically ✓ Are stays fitted with nuts or riveted over ✓

Diameter of stays over thread ✓ Radius of spherical or dished furnace crown 3'-8" Working pressure by rule 117 LBS

Thickness of Ogee Ring none Diameter as per rule { D ✓
a ✓ Working pressure by rule ✓

Combustion Chamber: Material ✓ Tensile strength ✓ Thickness of top plate ✓

Radius if dished ✓ Working pressure by rule ✓ Thickness of back plate ✓ Diameter if circular ✓

Length as per rule ✓ Pitch of stays ✓ Are stays fitted with nuts or riveted over ✓

Diameter of stays over thread ✓ Working pressure of back plate by rules ✓

Tube Plates: Material Circular-Steel Tensile strength 26/30 Thickness 13/16 Mean pitch of stay tubes in nests ✓

Pitch in outer vertical rows Circular 5.57
Vertical 3" Dia. of tube holes FRONT { plain 2 3/4 BACK { Thimble tube
pitchWorking pressure by rules { front ✓
back ✓

to combustion chamber tops: Material ✓

Depth and thickness of girder at centre ✓ Tensile strength ✓ Length as per rule ✓

Distance apart ✓ No. and pitch of stays in each ✓ Working pressure by rule ✓

Crown stays: Material ☒ Tensile strength ☒ Diameter ☒ at body of stay, or over threads ☒

No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by rules ☒

Screw stays: Material ☒ Tensile strength ☒ Diameter ☒ at turned off part, or over threads ☒ No. of threads per inch ☒

Area supported by each stay ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒

Tubes: Material Steel External diameter ☒ Thimble 2 3/4 dia Thickness ☒ 9. B.W.G.

No. of threads per inch ☒ Pitch of tubes 5.57. Circular. 3" Vertical Working pressure by rules ☒

Manhole Compensation: Size of opening in shell plate 10" x 9" Section of compensating ring 3 1/2 x 2 No. of rivets and diameter ☒

of rivet holes 16 - 15/16 Outer row rivet pitch at ends 2 3/4 Depth of flange if manhole flanged ☒

Uptake: External diameter ☒ Thickness of uptake plate ☒

Cross Tubes: No. ☒ External diameters ☒ Thickness of plates ☒

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

Yes

The foregoing is a correct description,
DAVY BROTHERS, LIMITED.

E. Astwood Manufacturer.

Dates of Survey ☒ During progress of work in shops - 20/6/30, 24/7/30, 6/8/30, 12/8/30, 8/9/30, 11/9/30 Is the approved plan of boiler forwarded herewith (If not state date of approval.) Yes

while building ☒ During erection on board vessel - 9/30 Nov 5, 12, 17, 18, 20 Total No. of visits 6 + 5

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

These boilers have been built under special survey and to the approved plan, the materials have been tested in accordance with the rules and the workmanship is good. The boilers are being despatched to Trieste.

Marked -

Boiler No. 2943

No. 523.

LLOYD'S TEST

200 lbs.

W.P. 100 lbs.

L.Y. 11-9-30.

Boiler No. 2944.

No. 524

LLOYD'S TEST

200 lbs.

W.P. 100 lbs.

L.Y. 11-9-30.

These Doulton Boilers have been fitted and removed from the ship on board this vessel and are to be used with exhaust gases of the two main engines. The boilers have been examined in working condition and their safety valves adjusted to blow at 100 lbs

R. F. Fawcett

Survey Fee ... £ 8 : 8 :

When applied for, 19

Travelling Expenses (if any) £ :

When received, 29.11.1930

Committee's Minute

FRI. 12 DEC 1930

Assigned

See Tri. J.E. Rpt 9027

R. F. Fawcett & L. Young
Engineer Surveyor to Lloyd's Register of Shipping



Lloyd's Register
Foundation