

REPORT ON BOILERS.

No. 1301.

Received at London Office 16 NOV 1956

Date of writing Report 13.11.56.19 When handed in at Local Office 19 Port of NOTTINGHAM.

No. in Survey held at Grantham Date, First Survey 4.3.55. Last Survey 18.11.55.19

eg. Book. on the trawler "MUKSUN" (Number of Visits) Tons { Gross..... Net.....

Built at Lowestoft By whom built Brooke Marine Ltd. Yard No. 243. When built

Engines made at By whom made Engine No. When made

Boilers made at Grantham By whom made Grantham Boiler & Crank Co. Ltd. Boiler No. 6010. When made 1955

Owners. Port belonging to

VERTICAL BOILER.

Made at Grantham By whom made Grantham Boiler & Crank Co. Ltd. Boiler No. 6010. When made 1955. Where fixed -

Manufacturers of Steel South Durham Steel and Iron Co. Ltd., West Hartlepool.

Total Heating Surface of Boiler 65 sq. ft. (F) & 140 sq. ft. (E) Is forced draught fitted Composite. Coal or Oil fired Oil/Exhaust Gas.

No. and Description of Boilers One - Clarkson Thimble Tube - Type BATOG/65/140. Working Pressure 100 lbs. p.s.i.

Tested by hydraulic pressure to 200 lbs. p.s.i. Date of test 28.1.55. No. of Certificate 150.

Area of fire grate in each Boiler No. and description of safety valves to each boiler 1 - 1 1/2" C.I. Double.

Area of each set of valves per boiler { per Rule... App'd. 1.46 as fitted... Pressure to which they are adjusted. Are they fitted with easing gear Yes.

State whether steam from main boilers can enter the donkey boiler. - Smallest distance between boiler or uptake and bunkers

or woodwork. - 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. - Largest internal dia. of boiler 3'0" Height 8'6"

Shell plates: Material Open Hearth Mild Steel. Tensile strength 28/32 T.T. Thickness 19/32"

Are the shell plates welded or flanged Unflanged. If fusion welded, state name of welding firm.

Have all the requirements of the Rules for Class I vessels been complied with. - Description of riveting: circ. seams { end... Single. inter... " 16/11/56

Long. seams Double. Dia. of rivet holes in { circ. seams 13/16" Pitch of rivets { 1 3/4" Percentage of strength of circ. seams { plate App'd. rivets " long. seams 13/16"

of longitudinal joint { plate App'd. rivets " Thickness of butt straps { outer 1/2" inner 1/2" Shell Crown: Whether complete hemisphere, dished partial

spherical, or flat Flat Flanged. Material O.H. Mild Steel. Tensile strength 26/30 T.T. Thickness 1/2"

Radius 2 1/2" Description of Furnace: Plain, spherical, or dished crown Flat Flanged. Material O.H. Mild Steel.

Tensile strength 26/30 T.T. Thickness External diameter { top 1-10 3/8 bottom 2-6 3/4 Length as per Rule

Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Diameter of stays over thread Radius of spherical or dished furnace crown

Thickness of Ogee Ring Diameter as per Rule { D 3-0 1/16 d 2-6 3/4

Combustion Chamber: Material O.H. Mild Steel. Tensile strength 26/30 T.T. Thickness of top plate 7/16"

Radius if dished - Thickness of back plate - Diameter if circular 2'4 1/2" Mean.

Length as per Rule - Pitch of stays -

Are stays fitted with nuts or riveted over Diameter of stays over thread

Tube Plates: Material { front back O.H.M.S. Tensile strength { 26/30 T.T. Thickness { 9/16" Mean pitch of stay tubes in nests -

If comprising shell, dia. as per Rule { front back Pitch in outer vertical rows { Dia. of tube holes FRONT { stay plain BACK { stay plain

Is each alternate tube in outer vertical rows a stay tube

Girders to Combustion Chamber Tops: Material Tensile strength

Depth and thickness of girder at centre Length as per Rule

Distance apart No. and pitch of stays in each

Crown Stays: Material..... Tensile strength..... Diameter { at body of stay,..... or over threads.....
No. of threads per inch..... Screw Stays: Material..... Tensile strength.....
Diameter { at turned off part,..... or over threads..... No. of threads per inch..... Are the stays drilled at the outer ends.....
Thimble..... Inner Tubeplate. 36 - 2 3/4" 9 Gauge.
Tubes: Material Solid Drawn, Hot Finished Steel. External diameter { 108 - 1 3/4" 10 " 274 - 2 3/4" 9 " Thickness {
Outer Shell. Pitch of tubes Inner. 3.85" Hor^l x 3" Vert. Outer. 5.23" " x 3" "
No. of threads per inch.....
Manhole Compensation: Size of opening in shell plate..... Section of compensating ring..... No. of rivets and diameter of rivet holes..... Outer row rivet pitch at ends..... Depth of flange if manhole flanged.....
Uptake: External diameter 11 5/8" Thickness of uptake plate 7/16"
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,
Manufacturer

Dates of Survey while building { During progress of work in shops - - 4.3.55. 18.3.55. 14.4.55. 21.4.55. 13.5.55. 16.8.55. Is the approved plan of boiler forwarded herewith 23.12.54. (If not state date of approval.)
During erection on board vessel - - 26.8.55. 18.11.55. Total No. of visits

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. 1215.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
This boiler has been built under Special Survey, in accordance with the Society's Rules, the Secretary's letters and the approved plan. The welding was carried out with suitable approved electrodes, to the satisfaction of the under-signed. On completion of welding the inner assembly was stress-relieved. The materials and workmanship are satisfactory.
The mountings have been tested and inspected by Surveyors to the Society. The boiler is being despatched to Lowestoft for installation in the vessel.

Survey Fee ... £ 12 : 0 : 0 When applied for 19.12.55 Paid.
Travelling Expenses (if any) £ 2 : 16 : 0 When received 19.
Date.....
Committee's Minute.....
Engineer Surveyor to Lloyd's Register of Shipping.

