

REPORT ON BOILERS.

No. 48129
AUG 23 1937

Received at London Office

Date of writing Report 20.7.37 When handed in at Local Office 20.8.37 Port of HULL.

No. in Survey held at Hull Date, First Survey 18th March 1937 Last Survey 12th July 1937

17701. on the Steam Trawler "ITALIA CAESAR" (Number of Visits ✓) Gross Tons 1518.10
Net Tons 282.73

Master ✓ Built at Beverly By whom built Lock, Melton & Gemmel Ltd Yard No. 625 When built 1937-7.

Engines made at Hull By whom made Arms & Smith Ltd Engine No. 658 When made 1937

Boilers made at Hull By whom made Arms & Smith Ltd Boiler No. 658 When made 1937.

Nominal Horse Power 135 Owners The East Steam Towing Co., Ltd Port belonging to Grimsby.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Appley, Frodingham Steel Co., Ltd (Letter for Record "S")

Total Heating Surface of Boilers 2370 square feet Is forced draught fitted No Coal or Oil fired Coal

No. and Description of Boilers One single Ended Return Tube Working Pressure 220 lbs/sq

Tested by hydraulic pressure to 380 lbs/sq Date of test 15.6.37. No. of Certificate 3976. Can each boiler be worked separately ✓

Area of Firegrate in each Boiler 66.5 sq ft No. and Description of safety valves to each boiler Two 3" diameter spring loaded

Area of each set of valves per boiler per Rule 12.6 sq in Pressure to which they are adjusted 220 lbs/sq 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 10" Is oil fuel carried in the double bottom under boilers ✓

Smallest distance between shell of boiler and tank top plating ✓ Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 15'-9" Length 11'-0" Shell plates: Material Steel Tensile strength 30-34 Tons/sq

Thickness 1 1/32" Are the shell plates welded or flanged No Description of riveting: circ. seams Double riveted.

long. seams Double riveted J.B.S. Diameter of rivet holes in circ. seams 1 1/2" Pitch of rivets 4 3/8"

Percentage of strength of circ. end seams plate 65.7 rivets 42.1 Percentage of strength of circ. intermediate seam plate rivets ✓

Percentage of strength of longitudinal joint plate 85 rivets 86.4 combined 87.3 Working pressure of shell by Rules 221 lbs/sq

Thickness of butt straps outer 1 1/8" inner 1 1/4" No. and Description of Furnaces in each Boiler Three Deighton Corrugated

Material Steel Tensile strength 26-30 Tons/sq Smallest outside diameter 4'-0"

Length of plain part top Thickness of plates bottom 3/4" Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 230 lbs/sq

End plates in steam space: Material Steel Tensile strength 26-30 Tons/sq Thickness 1 1/4" Pitch of stays 18" x 18" Mean.

How are stays secured Double nuts & washers. Working pressure by Rules 225 lbs/sq

Tube plates: Material front Steel back Steel Tensile strength 26-30 Tons/sq Thickness 7/8"

Mean pitch of stay tubes in nests 10.828" Pitch across wide water spaces 1'-2 1/4" Working pressure front 237 lbs/sq back 236 lbs/sq

Girders to combustion chamber tops: Material Steel Tensile strength 29-33 Tons/sq Depth and thickness of girder 9 3/4" x 7 1/2" x 1/2" Double

at centre 10" Centre x 1/2" x 1/2" Double Length as per Rule 34" Distance apart 11" Centre 9" Wings No. and pitch of stays 3 x 8" pitch.

Working pressure by Rules 221 lbs/sq Combustion chamber plates: Material Steel

Tensile strength 26-30 Tons/sq Thickness: Sides 3/4" Back 1/2" Top 1/6" Bottom 7/8"

Pitch of stays to ditto: Sides 9" x 8" Back Wings 7 1/2" x 9 3/4" Top 9" x 8" Are stays fitted with nuts or riveted over Auto

Working pressure by Rules 221 lbs/sq Front plate at bottom: Material Steel Tensile strength 26-30 Tons/sq

Thickness 1" Lower back plate: Material Steel Tensile strength 26-30 Tons/sq Thickness 7/8"

Pitch of stays at wide water space 1'-2 1/4" x 8 1/2" Mean Are stays fitted with nuts or riveted over Auto

Working Pressure 222 lbs/sq Main stays: Material Steel Tensile strength 28-32 Tons/sq

Diameter At body of stay, 3 1/4" or Over threads No. of threads per inch 6 Area supported by each stay 324 square inches

Working pressure by Rules 226 lbs/sq Screw stays: Material Steel Tensile strength 26-30 Tons/sq

Diameter At turned off part, 1 3/4" or Over threads No. of threads per inch 9 Area supported by each stay 74 square inches

