

# REPORT ON BOILERS.

Indb. No. 5120  
S. No. 23358  
TUES. 23 JUL 1907

Received at London Office

Date of writing Report 19 When handed in at Local Office 22 July 1907 Port of MIDDLESBROUGH-ON-TEES

No. in Survey held at Stockton Date, First Survey 21 February Last Survey 19 July 1907

Reg. Book. on the Donkey Boiler of S.S. Moravitz (Number of Visits 31) Tons Gross 4799.50 Net 3113.42

Master Emil Gilliam Built at Sunderland By whom built J. Thompson & Son Ltd When built 1907

Engines made at Stockton By whom made Polain & Co Ltd when made 1907

Boilers made at Stockton By whom made Polain & Co Ltd when made 1907

Registered Horse Power Owners Atlantic Soc Anon de Nav Moravitz Port belonging to Fiume

## MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel John Spencer & Son Ltd

(Letter for record S) Total Heating Surface of Boilers 1373 sq ft Is forced draft fitted No No. and Description of Boilers One Cyl Tubular Working Pressure 120 lbs Tested by hydraulic pressure to 240 lbs Date of test 28-5-07

No. of Certificate 3932 Can each boiler be worked separately No Area of fire grate in each boiler 33 1/2 sq ft No. and Description of safety valves to each boiler Two Spring Area of each valve 5.94 sq in Pressure to which they are adjusted 120 lbs

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No

Smallest distance between boilers or uptakes and bunkers or woodwork 24 in Dia. of boilers 12-6 Length 10-0

Material of shell plates Steel Thickness 3/4 Range of tensile strength 28/32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams 2 D 1/2 in long. seams D B Straps Diameter of rivet holes in long. seams 7/8 Pitch of rivets One row 6 3/4 Two rows 5 3/8

Lap of plates or width of butt straps 1-1 7/8 Per centages of strength of longitudinal joint rivets 88.4 plate 87. Working pressure of shell by rules 122 lbs

Size of manhole in shell 16 x 12 Size of compensating ring 30 x 26 x 3/4 No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 3-5 Length of plain part top 5-8 bottom 6-0 Thickness of plates crown 9/16 bottom 9/16 1/2

Description of longitudinal joint Welded No. of strengthening rings Working pressure of furnace by the rules 131 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16 1/2 Back 9/16 1/2 Top 9/16 1/2 Bottom 1 1/16 Pitch of stays to ditto: Sides 9 3/4 x 9 3/4 Back 9 3/4 x 9 3/8

Top 9 3/4 x 9 3/4 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 128 lbs Material of stays Steel Diameter at smallest part 1 7/16 Area supported by each stay 95 sq in Working pressure by rules 136 lbs End plates in steam space: Material Steel Thickness 1 5/16

Pitch of stays 20 x 16 1/2 How are stays secured N x W Working pressure by rules 123 lbs Material of stays Steel Diameter at smallest part 2 3/8

Area supported by each stay 330 sq in Working pressure by rules 184 lbs Material of Front plates, at bottom Steel Thickness 1 Material of Lower back plate Steel Thickness 1 5/16 Greatest pitch of stays 19 1/2 x 9 3/4 Working pressure of plate by rules 127 lbs Diameter of tubes 3 1/4

Pitch of tubes 4 1/2 x 4 5/8 Material of tube plates Steel Thickness: Front 1 Back 1 3/16 Mean pitch of stays 12 3/4 Pitch across wide water spaces 14 1/4 Working pressures by rules 145.5 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 3/4 x 1 1/4 Length as per rule 26 1/2 Distance apart 9 3/4 Number and pitch of Stays in each Two 9 3/4

Working pressure by rules 130 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked separately

Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

The foregoing is a correct description,

Geo Nettleship Manufacturer.

Dates of Survey During progress of work in shops - - - 1907 April 10-11-24 May 2-7-22

while building During erection on board vessel - - - June 26-28 July 2-3

Is the approved plan of boiler forwarded herewith

Total No. of visits 10

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

This boiler has been constructed under special survey, the materials & workmanship are good and efficient & when tested under steam was found tight and satisfactory.

Survey Fee ... £ 2: 2:0 When applied for, 10.7.07  
Travelling Expenses (if any) £ : : When received, 19.7.07

Geo. R. Milner  
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. JUL 26 1907

Assigned on minute on attached report

