

REPORT ON BOILERS.

Hpl. No. 13262
No. 4985

SAT. 1 JUN 1907

Port of MIDDLESBROUGH-ON-TEES

Received at London Office

No. in Survey held at Stockton Date, first Survey 21st February Last Survey 19
 eg. Book. Donkey Boiler No 2184 for S/S Jerra (Number of Visits) 1
 Tons { Gross 2140.05
 Net 1354.14
 Supplied on the South Built at West Hartlepool By whom built Furness W & Co Ltd When built 1907-5
 Engines made at Hartlepool By whom made Richardsons, Newcastle & Co Ltd when made 1907.
 Boilers made at Stockton By whom made J Sudron & Co Ltd when made 1907
 Owners Huddart, Parker & Proprietary Ltd. Port belonging to Melbourne

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

Total Heating Surface of Boilers 870 sq ft Is forced draft fitted No No. and Description of Boilers One Cyl Tubular
 Working Pressure 100 lb Tested by hydraulic pressure to 200 lb Date of test 28-3-07

No. of Certificate 3886 Can each boiler be worked separately Yes Area of fire grate in each boiler 3 1/4 sq ft No. and Description of Safety valves to each boiler 2 Spring loaded Area of each valve 5.939 sq in Pressure to which they are adjusted 100 lbs per 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 No
 Smallest distance between boilers or uptakes and bunkers or woodwork 1'-6" Mean dia. of boilers 10'-3" Length 10'-0"

Material of shell plates Steel Thickness 1 1/16" Range of tensile strength 28/32 Are the shell plates welded or flanged No
 Descrip. of riveting: cir. seams 2/2 long. seams 2/2 Diameter of rivet holes in long. seams 15/16" Pitch of rivets 4 1/4"

Lap of plates or width of butt straps 6 7/8" Per centages of strength of longitudinal joint 77.9 Working pressure of shell by rules 119 lb Size of manhole in shell 16" x 12" Size of compensating ring 5 1/2" x 7 1/8" No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 3'-0" Length of plain part 6'-3" Thickness of plates 19/32"

Description of longitudinal joint Welded No. of strengthening rings None Working pressure of furnace by the rules 112 lb Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 3/4" Pitch of stays to ditto: Sides 9 1/2" x 8 3/4" Back 9 3/4" x 9"

Top 9" x 8 3/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 152 lb Material of stays Iron Area at smallest part 1.69 sq in Area supported by each stay 87.75 sq in Working pressure by rules 183 lb End plates in steam space: Material Steel Thickness 25/32"

Pitch of stays 17 1/2" x 17 3/4" How are stays secured N + W Working pressure by rules 111 lb Material of stays Iron Area at smallest part 5.27 sq in
 Area supported by each stay 310.6 sq in Working pressure by rules 127 lb Material of Front plates at bottom Steel Thickness 25/32" Material of

Lower back plate Steel Thickness 27/32" Greatest pitch of stays 14" x 9" Working pressure of plate by rules 152 lb Diameter of tubes 5 1/2"
 Pitch of tubes 4 3/4" x 4 3/4" Material of tube plates Steel Thickness: Front 25/32" Back 3/4" Mean pitch of stays 10.6" Pitch across wide

water spaces 14 1/2" Working pressures by rules 111 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 1/2" x 5 7/8" Length as per rule 2.476 Distance apart 9" Number and pitch of Stays in each Two, 8 3/4"

Working pressure by rules 105 lb Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately

Boles Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 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

VERTICAL DONKEY BOILER—No. Description Manufacturers of steel

Made at By whom made When made Where fixed Working pressure
 tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength

Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets
 Lap of plating Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown plates
 Plates

Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace
 Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown plates

plates Radius of do. Stayed by Diameter of uptake Thickness of uptake plates
 Thickness of water tubes

The foregoing is a correct description,
 THOMAS SUDRON & CO. LONDON
 Manufacturer.

Dates of Survey while building
 During progress of work in shops -- 1907: Feb 21, March 6, 13, 20, 26, 28.
 During erection on board vessel ---
 Total No. of visits

Is the approved plan of main boiler forwarded herewith
 " " " donkey " " " Yes



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

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

WEST HARTLEPOOL.

Certificate (if required) to be sent to
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee...	£	:	:	When applied for,
Special	£	:	:	19
Donkey Boiler Fee ...	£	2:	2:0	When received
Travelling Expenses (if any) £	:	:	:	

Geo. A. Milner & J. Hudson
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUES. JUN 4 1907

Assigned See Minute on
 App. Rpt. no 18262

