

REPORT ON BOILERS.

No. 15820

WED. SEP. 29 1920

Received at London Office

Date of writing Report 23rd Sept 1920 When handed in at Local Office 25/9/1920 Port of WEST HARTLEPOOL
No. in Survey held at West Hartlepool Date, First Survey 30th Sept/19 Last Survey 24th Decr 1919
Reg. Book. on the Auxiliary Boiler (R 286 C) (Number of Visits) Gross Tons Net Tons
Master Built at Middlesbro By whom built Smiths Dock Co Ltd When built 1920
Engines made at By whom made When made
Boilers made at West Hartlepool By whom made Central Marine Engine Works Ltd When made 1919
Registered Horse Power Owners Port belonging to

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

Letter for record S Total Heating Surface of Boilers 1210 sq ft Is forced draft fitted No No. and Description of Boilers One single ended Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 24.12.19
No. of Certificate 3555 Can each boiler be worked separately Yes Area of fire grate in each boiler 38 sq ft No. and Description of safety valves to each boiler 2 Spring loaded Area of each valve 3.14 sq in Pressure to which they are adjusted 185 lb
Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes
Smallest distance between boilers or uptakes and bunkers or woodwork 1.9 in Mean dia. of boilers 12'-0" Length 10'-0"
Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 27/30 Are the shell plates welded or riveted Yes
Descrip. of riveting: cir. seams DR. Lap. long. seams JR. D.B.S Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 7 1/4"
Gap of plates or width of butt straps 15 3/4" Per centages of strength of longitudinal joint rivets 88 Working pressure of shell by rules 185 Size of manhole in shell 12" x 16" Size of compensating ring 2'-9" x 3'-1" x 1 1/2" No. and Description of Furnaces in each boiler 2 Deightons Material Steel Outside diameter 3'-7 1/2" Length of plain part top 17" bottom 32" Thickness of plates 1 1/2"
Description of longitudinal joint welded No. of strengthening rings 1 Working pressure of furnace by the rules 190 Combustion chamber plates: Material Steel Thickness: Sides 1 1/4" Back 5/8" Top 1 1/4" Bottom 7/8" Pitch of stays to ditto: Sides 8 1/4" x 9 3/4" Back 8 1/2" x 8 3/4"
Top 9 3/4" x 8 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 195 Material of stays Steel Diameter at smallest part 1.79 in Area supported by each stay 8 1/2" x 9 3/4" Working pressure by rules 210 End plates in steam space: Material Steel Thickness 1"
Pitch of stays 16 x 15 1/2" How are stays secured D nuts Working pressure by rules 181 Material of stays Steel Diameter at smallest part 4.56 in
Area supported by each stay 16" x 15 1/2" Working pressure by rules 192 Material of Front plates at bottom Steel Thickness 1" Material of lower back plate Steel Thickness 27/32" Greatest pitch of stays 13 1/2" x 8 3/4" Working pressure of plate by rules 190 Diameter of tubes 3 1/2"
Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates Steel Thickness: Front 1" Back 1 1/4" Mean pitch of stays 9" Pitch across wide water spaces 14 1/4" Working pressures by rules 189 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8" x 1 1/4" Length as per rule 28 1/4" Distance apart 8 1/2" Number and pitch of Stays in each Two 9 3/4"
Working pressure by rules 184 Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately Yes
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

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
Gap of plating Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown 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
Radius of do. Stayed by Diameter of uptake Thickness of uptake plates
Thickness of water tubes

FOR THE CENTRAL MARINE ENGINE WORKS
The foregoing is a correct description,
(Sd. Eng & Co. (1918) Ltd.)
Robt. Smith Manufacturer.

Dates During progress of work in shops - 1919 Sep 30 Oct 9 16 20 27 31 Nov 3 4 5 6 7 11 12 13 14 Dec 1 3 11 12 16 19 22 24
of Survey During erection on board vessel -
while building Total No. of visits 23
Is the approved plan of main boiler forwarded herewith Yes Please return for duplicate
" " " donkey " " "

MANAGING DIRECTOR, C.M.E.W.

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

This boiler has been built under Special Survey.
 The materials and workmanship are good.
 It has been despatched to Middlesbrough for fitting
 on board
 This boiler has now been securely fitted on board mounted and
 ready for fitted

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	£	See accompanying	19.....
Donkey Boiler Fee	£	Main Bk	When received,
Travelling Expenses (if any) £	:	Report	19.....

Committee's Minute

Assigned

TUE. JAN. 25 1921

R.D. Philston Thomas Miller
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping



Lloyd's Register
 Foundation