

REPORT ON BOILERS.

No. 77854
W.F.D. 14 MAY 1924

Received at London Office

Date of writing Report 19 _____ When handed in at Local Office 13/5/1924 Port of NEWCASTLE-ON-TYNE
 No. in Survey held at _____ Date, First Survey 23rd October 1922 Last Survey 16th May 1924
 Reg. Book. _____
 on the **Donkey Boiler for S.S. BRITISH DUCHESS.** (Number of Visits _____) (Gross _____) (Net _____)
 Built at _____ By whom built **J. L. Chapman & Co.** When built 1924
 Engines made at **Janow-on-Tyne.** By whom made **Palmer & Co. Ltd.** When made 1924
 Boilers made at **do** By whom made **do** When made 1924
 Registered Horse Power _____ Owners **British Tanker Co. Ltd.** Port belonging to _____

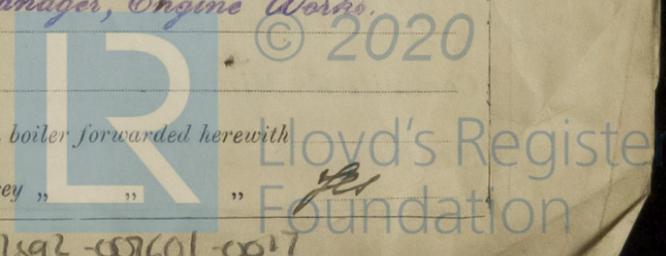
MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **J. Spencer & Co.**
 Letter for record **S.** Total Heating Surface of Boilers **1119 sq ft** Is forced draft fitted **No** No. and Description of Boilers **One cyl multi**
 Working Pressure **120** Tested by hydraulic pressure to **250** Date of test **9/2/23**
 No. of Certificate **9725** Can each boiler be worked separately **✓** Area of fire grate in each boiler **Oil Fuel** No. and Description of Safety valves to each boiler **2 spring loaded** Area of each valve **7.068 sq in** Pressure to which they are adjusted **125 lb**
 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 **10'-6"** Mean dia. of boilers **10'-6"** Length **10'-6"**
 Material of shell plates **Steel** Thickness **3/2"** Range of tensile strength **28/32** Are the shell plates welded or flanged **No**
 Descrip. of riveting: cir. seams **D.R.L.** long. seams **TRIBS.** Diameter of rivet holes in long. seams **7/8"** Pitch of rivets **4 5/8"**
 Width of butt straps **1-1/2"** Per centages of strength of longitudinal joint rivets **91.6%** Working pressure of shell by plates **81%**
 Size of manhole in shell **20" x 16"** Size of compensating ring **32 1/2" x 30" x 3/4"** No. and Description of Furnaces in each boiler **2 Scigittans**
 Material **Steel** Outside diameter **3'-1 1/2"** Length of plain part **15'-5"** Thickness of plates crown **3/8"** bottom **3/8"**
 Description of longitudinal joint **Welded** No. of strengthening rings **-** Working pressure of furnace by the rules **155.5** Combustion chamber
 Material **Steel** Thickness: Sides **19/32"** Back **3/4"** Top **19/32"** Bottom **19/32"** Pitch of stays to ditto: Sides **10" x 10"** Back **11" x 9 1/2"**
8 1/2" x 10" If stays are fitted with nuts or riveted heads **Yes** Working pressure by rules **121.5** Material of stays **Steel**
 Smallest part **1.338** Area supported by each stay **104.5** Working pressure by rules **120** End plates in steam space: Material **Steel** Thickness **1/2"**
 Area supported by each stay **19 x 23.5** Working pressure by rules **120** Material of stays **Steel** Area at smallest part **2 1/4"**
 Area supported by each stay **446.5** Working pressure by rules **123** Material of Front plates at bottom **Steel** Thickness **3/4"** Material of
 over back plate **Steel** Thickness **3/4"** Greatest pitch of stays **14 1/4" x 11"** Working pressure of plate by rules **139** Diameter of tubes **3"**
 Pitch of tubes **4 1/4" x 4 1/4"** Material of tube plates **Steel** Thickness: Front **3/2"** Back **3/2"** Mean pitch of stays **10.6** Pitch across wide
 er spaces **14 1/4" x 8 1/2"** Working pressures by rules **150.5** Girders to Chamber tops: Material **Steel** Depth and thickness of
 boiler at centre **6" x 1"** Length as per rule **25.7"** Distance apart **8 1/2"** Number and pitch of Stays in each **2 @ 10"**
 Working pressure by rules **124** Steam dome: description of joint to shell _____ % of strength of joint _____
 Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____
 Working pressure of shell by rules _____ Crown plates _____ Thickness _____ How stayed _____

VERTICAL DONKEY BOILER— No. _____ Description _____ Manufacturers of steel _____
 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 _____
 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 _____
 Per centage of strength of joint _____ Working pressure of shell by rules _____ Thickness of shell crown plates _____
 No. of Stays to do. _____ Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____
 Description of joint _____ Working pressure of furnace by rules _____ Thickness of furnace crown
 Stayed by _____ Diameter of uptake _____ Thickness of uptake plates _____
 Description of water tubes _____

Palmer & Co. Ltd. Description,
D. Kemp. Manufacturer.
General Manager, Engine Works.

During progress of work in shops - - - } See report on machinery
 During erection on board vessel - - - }
 Total No. of visits _____

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



002592-00601-0017

GENERAL REMARKS

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

This boiler has been built under special survey & the materials & workmanship are good. On completion it was tested by hydraulic pressure to 230 lbs & found sound & tight, for notation see machinery report.

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the spaces for Committee's Minute.)

| | |
|--------------------------------|-------------------|
| The amount of Entry Fee .. £ | When applied for. |
| Special .. £ |19..... |
| Donkey Boiler Fee .. £ | When received. |
| Travelling Expenses (if any) £ |19..... |

Committee's Minute

TUE. 20 MAY. 1924

Assigned

J. Davitt
Engineer Surveyor to Lloyd's Register of Shipping



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