

# REPORT ON BOILERS.

No. 15126.

Auxiliary

Received at London Office

Date of writing Report 31<sup>st</sup> May 1915 When handed in at Local Office 191 Port of West Hartlepool  
 No. in Survey held at W. Hartlepool Date, First Survey 14<sup>th</sup> Oct. 114 Last Survey 29<sup>th</sup> May 1915  
 Reg. Book. on the steel screw steamer "City of Hankow" (Wm Gray & Co's SS No. 857) (Number of Visits 139) Tons { Gross 7369 Net 4767  
 Master W. J. Hamford 00-15 Built at W. Hartlepool By whom built Wm Gray & Co. Ltd. When built 5-1915  
 Engines made at W. Hartlepool By whom made Central Marine Engine Works When made 1915  
 Boilers made at W. Hartlepool By whom made Central Marine Engine Works When made 1915  
 Registered Horse Power 738 Owners Pfaffman Lines, Ltd. (Hall Line Ltd., Liverpool) Port belonging to Liverpool

Central No. 857

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

(Letter for record S) Total Heating Surface of Boilers 2210 4/8 ft. Is forced draft fitted Yes No. and Description of Boilers one, single ended Working Pressure 225 lbs. Tested by hydraulic pressure to 450 lbs. Date of test 24/2/15  
 No. of Certificate 3398 Can each boiler be worked separately Yes Area of fire grate in each boiler 52 4/8 ft. No. and Description of safety valves to each boiler two (2), Spring Area of each valve 11.04 4/8 in. Pressure to which they are adjusted 230 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 30" Mean dia. of boiler 14'-0 1/8" Length 12'-4"  
 Material of shell plates steel Thickness 1 7/16" Range of tensile strength 27/30 tons Are the shell plates welded or flanged both  
 Descrip. of riveting: cir. seams treble, lapped long. seams treble, dble straps Diameter of rivet holes in long. seams 1 7/16" Pitch of rivets 9 9/16"  
 Lap of plates or width of butt straps 21" Per centages of strength of longitudinal joint rivets 87.7 Working pressure of shell by plate 84.96  
 rules 225 lbs. Size of manhole in shell 16" x 12" Size of compensating ring 36 1/2" x 32 1/2" x 1 7/8" No. and Description of Furnaces in each boiler three (3), Deighton's Material steel Outside diameter 41 5/8" Length of plain part top 19 3/32" Thickness of plates bottom 19 3/32"  
 Description of longitudinal joint welded No. of strengthening rings corrug. Working pressure of furnace by the rules 226 lbs. Combustion chamber plates: Material steel Thickness: Sides 1 1/16" Back 1 1/16" Top 1 1/16" Bottom 1" Pitch of stays to ditto: Sides 8 1/2" Back 8 3/4" x 8"  
 Top 8 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 226 lbs. Material of stays steel Diameter at smallest part 1.633 Area supported by each stay 8 1/2" Working pressure by rules 261 lbs. End plates in steam space: Material steel Thickness 19 3/32"  
 Pitch of stays 18" How are stays secured dble nuts Working pressure by rules 227 lbs. Material of stays steel Diameter at smallest part 3.03"  
 Area supported by each stay 18" Working pressure by rules 231 lbs. Material of Front plates at bottom steel Thickness 1 3/32" Material of Lower back plate steel Thickness 1" Greatest pitch of stays 15 1/2" Working pressure of plate by rules 230 lbs. Diameter of tubes 2 1/2"  
 Pitch of tubes 33 3/4" Material of tube plates steel Thickness: Front 1 3/32" Back 1 3/16" Mean pitch of stays 7 1/2" Pitch across wide water spaces 14" Working pressures by rules 234 lbs. Girders to Chamber tops: Material steel Depth and thickness of girder at centre 11" x 1 1/2" Length as per rule 34 1/2" Distance apart 8 1/2" Number and pitch of Stays in each 3, 8 1/2"  
 Working pressure by rules 235 lbs. Superheater on 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, FOR THE CENTRAL MARINE ENGINE WORKS.

John Williams Manufacturer.

Is the approved plan of boiler forwarded herewith Assistant Manager.

Dates of Survey while building } During progress of work in shops - - } See accompanying Machinery report.  
 } During erection on board vessel - - - }

Total No. of visits

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

This Auxiliary Boiler has been constructed under special survey & in accordance with the approved plan. The boiler has been fitted on board the above-named steamer.

Survey Fee ... £ See Machinery Report When applied for, ..... 191  
 Travelling Expenses (if any) £ ..... When received, ..... 191

M. H. G.

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

TUE. JUN. 15. 1915

Committee's Minute

Assigned

All minute for rpt attached



Lloyd's Register Foundation

W238-0084