

# Auxiliary REPORT ON BOILERS.

No. 15126.

Received at London Office

Date of writing Report 31<sup>st</sup> May 1915 When handed in at Local Office

Port of West Hartlepool

No. in Survey held at W. Hartlepool

Date, First Survey 14<sup>th</sup> Oct. 1914 Last Survey 29<sup>th</sup> May 1915

Reg. Book.

(Number of Visits 139)

Gross 7369

Net 4767

on the steel screw steamer "City of Hankow" (L. Gray &amp; Co's SS No. 857)

Master W. J. Humphreys 00-15 Built at W. Hartlepool

By whom built L. Gray &amp; 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 Ellerman Lines, Ltd. (Hall Line Ltd., Mgrs.)

Port belonging to Liverpool

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

(Letter for record S) Total Heating Surface of Boilers 2210 sq. 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 sq. ft. No. and Description of

safety valves to each boiler two (2), Spring Area of each valve 11.04 sq. 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 plate 84.96 Working pressure of shell by

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 Thickness of plates crown 19/32

Description of longitudinal joint welded No. of strengthening rings corrugated 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 19/32

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 13/32" 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 13/32" Back 13/16" 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.

Manufacturer.

John Williams

Is the approved plan of boiler forwarded herewith Assistant Manager.

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

Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &amp;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) £ See Machinery Report When received, 191

TUE. JUN. 15. 1915

Committee's Minute

Assigned

See minute for report attached

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

Lloyd's Register  
Foundation

W238-0084