

REPORT ON BOILERS

No. 5030

SAT. 12 OCT 1907

Received at London Office

Date of writing Report 11 Oct 07 When handed in at Local Office 11 Oct 07 Port of Grimsby
 No. in Survey held at Grimsby Date, First Survey Dec 7th 1906 Last Survey Oct. 4th 1907
 Reg. Book. on a steel boiler for stock (Number of Visits 49) Tons { Gross / Net
 Master _____ Built at _____ By whom built _____ When built _____
 Engines made at _____ By whom made _____ when made _____
 Boilers made at Grimsby By whom made G. Central Co. of Eng. & S. Co. when made 1907
 Registered Horse Power _____ Owners _____ Port belonging to _____

Boiler No. 5030

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Stearns & Co. Ipswich, Leeds & Yorks.

(Letter for record S) Total Heating Surface of Boilers 1340 sq ft forced draft fitted _____ No. and Description of Boilers Single ended Marine type Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 4/10/07

No. of Certificate 62 Can each boiler be worked separately _____ Area of fire grate in each boiler 34.7 sq ft No. and Description of safety valves to each boiler _____ Area of each valve _____ Pressure to which they are adjusted _____

Are they fitted with easing gear _____ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler _____

Smallest distance between boilers or uptakes and bunkers or woodwork None Mean dia. of boilers 12-6" Length 10-0"

Material of shell plates Steel Thickness 1 3/32 Range of tensile strength 2732 lbs Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams LDR long. seams DRS. T.R. Diameter of rivet holes in long. seams 18 Pitch of rivets 7 3/4

Lap of plates or width of butt straps 16 5/8 Per centages of strength of longitudinal joint rivets 87-125 Working pressure of shell by rules 160 lbs

Size of manhole in shell 16 x 12 Size of compensating ring 2-8 x 2-4 No. and Description of Furnaces in each boiler 2 plain Material Steel Outside diameter 3-7 Length of plain part 5-11 1/2 Thickness of plates crown 3/4 bottom 3/4

Description of longitudinal joint weld No. of strengthening rings _____ Working pressure of furnace by the rules 179 lbs Combustion chamber plates: Material Steel Thickness: Sides 2 1/32 Back 2 1/32 Top 4 1/32 Bottom 1 3/16 Pitch of stays to ditto: Sides 8 3/4 x 9 1/4 Back 8 3/4 x 9

Top 8 1/2 x 9 1/4 If stays are fitted with nuts or riveted heads auto Working pressure by rules 194 lbs Material of stays Steel Diameter at smallest part 1-6 1/2 Area supported by each stay 5 1/2 Working pressure by rules 230 lbs End plates in steam space: Material Steel Thickness 1 1/8

Pitch of stays 17 1/2 x 18 How are stays secured Stk Nuts Working pressure by rules 180 lbs Material of stays Steel Diameter at smallest part 2-9 1/4

Area supported by each stay 315 sq in Working pressure by rules 210 lbs Material of Front plates at bottom Steel Thickness 1 Material of Lower back plate Steel Thickness 1 5/16 Greatest pitch of stays 15 Working pressure of plate by rules 180 lbs Diameter of tubes 3 1/4 ext

Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates Steel Thickness: Front 1 Back 3/4 Mean pitch of stays 9 Pitch across wide water spaces 14 1/4 Working pressures by rules 192 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 1/2 x 1 1/2 Length as per rule 2-7 5/8 Distance apart 8 1/4 Number and pitch of Stays in each 2-9 1/4

Working pressure by rules 183 lbs Superheater or 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 GREAT CENTRAL CO-OPERATIVE ENGINEERING & SHIP REPAIRING COMPANY, LTD. Manufacturer.

Dates of Survey while building: During progress of work in shops - 1906. Dec. 7. 13. 14. 20; 1907. Jan. 1. 4. 8. 10. 16. 21. 24. 28. 29. 30. Is the approved plan of boiler forwarded herewith Yes (Copy)
 while building (If any portion on board vessel) - Feb. 5. 8. 14. 19. 23. 27. Mar. 4. 7. 11. 14. 18. 28. Apr. 8. 12. 17. 18. May 3. 7. 12. 17. 22. 23. June 4. 6. 10. 15. 19. July 7. 22. 26. 29. Aug. 3. Sep. 4. 23. Oct. 4. Total No. of visits 49

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under Special Survey, the materials & workmanship are good and on completion the boiler satisfactorily withstood a hydraulic test of 360 lbs per sq inch.

Survey Fee £ 4 : 4 : 0 When applied for, 11th Oct. 07
 Travelling Expenses (if any) £ : : When received, 14-12-07

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

Committee's Minute _____
 Assigned _____

1055. 6 APL 1909

