

REPORT ON BOILERS.

No. 4985.

26 OCT 1925

Received at London Office

Date of writing Report Sept. 18th 1925 When handed in at Local Office Osaka Port of Kobe
 No. in Survey held at Osaka Date, First Survey Jan'y 10th Last Survey 26th Aug: 1925
 Reg. Book. on the S.S. "TSUKUSHI MARU." (Number of Visits 22.) Gross Tons Net Tons
 Master Built at Osaka By whom built Osaka Iron Works Ltd When built 1925-8
 Engines made at Osaka By whom made Osaka Iron Works Ltd when made 1925-8
 Boilers made at Osaka By whom made Osaka Iron Works Ltd when made 1925-8
 Registered Horse Power 1500. Owners KANIMA SHOGYO KABUSHIKI KAISHA Port belonging to SHIMANOSEKI.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Yawata Steel Co.

(Letter for record B) Total Heating Surface of Boilers 3011 \square Is forced draft fitted Yes No. and Description of Boilers Two Single Ended Multitubular Working Pressure 200 ψ Tested by hydraulic pressure to 350 ψ Date of test 22-7-25
 No. of Certificate 707 Can each boiler be worked separately Yes Area of fire grate in each boiler 42.6 \square No. and Description of safety valves to each boiler 2 Spring loaded Area of each valve 4.91 \square Pressure to which they are adjusted 205 ψ
 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 16" Mean dia. of boilers 12'-3" Length 11'-0"
 Material of shell plates O.H. Steel Thickness 1 1/8" Range of tensile strength 28-32 Tons Are the shell plates welded or flanged No
 Descrip. of riveting: cir. seams: D.R. Lap. long. seams T.R. D.B.S. Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 8 1/4"
 Lap of plates or width of butt straps 17 3/4" Per centages of strength of longitudinal joint 91.6 Working pressure of shell by rules 201 ψ Size of manhole in shell 16" x 12" Size of compensating ring 35 3/4" x 31 3/4" x 1 1/8" No. and Description of Furnaces in each boiler 2 Morrison Material O.H. Steel Outside diameter 48 3/4" Length of plain part 43 3/2" Thickness of plates 43
 Description of longitudinal joint weld No. of strengthening rings Working pressure of furnace by the rules 215 ψ Combustion chamber plates: Material O.H. Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 7/8" Pitch of stays to ditto: Sides 7 1/2" x 7" Back 8" x 8"
 Top 7" x 8 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 211 ψ Material of stays O.H. Steel Diameter at smallest part 1.48" Area supported by each stay 64 \square Working pressure by rules 238 ψ End plates in steam space: Material O.H. Steel Thickness 1 3/32"
 Pitch of stays 17" x 16 1/2" How are stays secured D. Nuts Working pressure by rules 247 ψ Material of stays O.H. Steel Diameter at smallest part 2.78"
 Area supported by each stay 280.5 \square Working pressure by rules 239 ψ Material of Front plates at bottom O.H. Steel Thickness 7/8" Material of Lower back plate O.H. Steel Thickness 1 1/16" Greatest pitch of stays 14" x 8" Working pressure of plate by rules 206 ψ Diameter of tubes 3" O.D.
 Pitch of tubes 4 1/16" x 4 1/8" Material of tube plates O.H. Steel Thickness: Front 7/8" Back 1 1/16" Mean pitch of stays 9.515 Pitch across wide water spaces 13 1/2" in ψ double Working pressures by rules 240 ψ Girders to Chamber tops: Material O.H. Steel Depth and thickness of girder at centre 8 1/2" x 2 x 1 3/8" Length as per rule 30 7/16" Distance apart 8 1/2" Number and pitch of Stays in each 3 at 7"
 Working pressure by rules 236 ψ Superheater or Steam chest; how connected to boiler 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 Yes 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, Yes
 Dates of Survey: During progress of work in shops: Jan'y 14th, 17, 20, 23, Feb'y 23, March 18, 25, April 14, 16, 27, 29. Is the approved plan of boiler forwarded to the Registrar Yes
 while building: During erection on board vessel: Aug 13, 20, 24. Total No. of visits 22.

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

These Boilers have been constructed under special survey in accordance with the Rules & Approved Plans. Material has been tested found efficient & the workmanship is good. They have now been satisfactorily fitted on board & tested under full steam pressure.

Survey Fee ... £ } SEE MACH & REPORT } When applied for. 19...
 Travelling Expenses (if any) £ } When received. 19...

H.D. Buchanan 1925
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.