

REPORT ON BOILERS.

No. 5101

Received at London Office 6 FEB 1926

Date of writing Report 19... When handed in at Local Office 19... Port of **Kobe**

No. in Survey held at **OSAKA** Date, First Survey **July 9th 1924** Last Survey **Dec 21 1925**

Reg. Book. on the **Single Screw Steamer GENBU MARU** BOILERS & MACH. (Number of Visits **63**) } Gross **1742**
 Tons } Net **1057.47**

Master Built at **Osaka** By whom built **Osaka Iron Works Ltd** When built **1925-12**

Engines made at **Osaka** By whom made **Osaka Iron Works Ltd** When made **1925-12**

Boilers made at **do** By whom made **do do do** When made **1925-12**

Registered Horse Power Owners **do do do** Port belonging to **TAKASAGO**

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

(Letter for record **S**) Total Heating Surface of Boilers **3010.6 sq ft** Is forced draft fitted **YES** No. and Description of Boilers **Two (SE) MULTITUBULAR** Working Pressure **200 lbs** Tested by hydraulic pressure to **350 lbs** Date of test **21-11-25**

No. of Certificate **706** Can each boiler be worked separately **YES** Area of fire grate in each boiler **42.6 sq ft** No. and Description of safety valves to each boiler **TWO SPRING LOADED** Area of each valve **4.910 sq in** Pressure to which they are adjusted **205 lbs**

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 or ~~woodwork~~ **18"** INSIDE Mean dia. of boilers **12'-3"** Length **11'-0"**

Material of shell plates **O.H. STEEL** Thickness **1 1/8"** Range of tensile strength **28-35 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 rivets **91.6** Working pressure of shell by rules **201** 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 **Two MORISON** Material **O.H. STEEL** Outside diameter **45 1/16"** Length of plain part top **13"** Thickness of plates crown **2 1/2"** bottom **3/2"**

Description of longitudinal joint **WELDED** No. of strengthening rings **0** Working pressure of furnace by the rules **209 lbs** 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 1/2"** 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 lbs** Material of stays **STEEL** Area at smallest part **1.730** Area supported by each stay **640** Working pressure by rules **238 lbs** End plates in steam space: Material **STEEL** Thickness **1 1/2"**

Pitch of stays **17" x 16 1/2"** How are stays secured **D. NUTS** Working pressure by rules **247 lbs** Material of stays **O.H. STEEL** Area at smallest part **6.100**

Area supported by each stay **2800** Working pressure by rules **239 lbs** Material of Front plates at bottom **O.H. STEEL** Thickness **3/8"** Material of Lower back plate **O.H. STEEL** Thickness **13/16"** Greatest pitch of stays **14" x 8"** Working pressure of plate by rules **206 lbs** Diameter of tubes **3" O.D.**

Pitch of tubes **4 1/16" x 4 1/8"** Material of tube plates **STEEL** Thickness: Front **7/8"** Back **13/16"** Mean pitch of stays **9.5** Pitch across wide water spaces **13 1/2" WITH 7/8" GAPS** Working pressures by rules **240 lbs** Girders to Chamber tops: Material **O.H. STEEL** Depth and thickness of girder at centre **8 1/2" x 1 5/8"** Length as per rule **30 1/16"** Distance apart **8 1/2"** Number and pitch of Stays in each **3 @ 7"**

Working pressure by rules **236 lbs** Steam dome: description of joint to shell **---** % of strength of joint **---**

Diameter **---** Thickness of shell plates **---** Material **---** Description of longitudinal joint **---** Diam. of rivet holes **---**

Pitch of rivets **---** Working pressure of shell by rules **---** Crown plates **---** Thickness **---** How stayed **---**

UPERHEATER. Type **---** Date of Approval of Plan **---** Tested by Hydraulic Pressure to **---**

Date of Test **---** Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler **---**

Diameter of Safety Valve **---** Pressure to which each is adjusted **---** Is Easing Gear fitted **---**



The foregoing is a correct description,
[Signature] Manufacturer.

Dates of Survey } During progress of work in shops - - }
 while building } During erection on board vessel - - - }

SEE MACHINERY REPORT. Is the approved plan of boiler forwarded herewith **YES**

Total No. of visits **---**

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

These Boilers have been constructed under special survey & tested in accordance with rule requirements & approved plans, & the materials & workmanship found good. They have now been efficiently installed on board & tested under full working conditions with satisfactory results.

Survey Fee ... £ } SEE MACHINERY REPORT. } When applied for, 19

Travelling Expenses (if any) £ } When received, 19

Committee's Minute Assigned *See J.P. Buckley report attached*

TUES. 9 FEB 1926

H.D. Buchanan & *[Signature]* 2021
 Engineer Surveyor to Lloyd's Register of Shipping.

