

REPORT ON BOILERS.

No. 1340

Date of writing Report 23rd Jan. 1935 When handed in at Local Office 9.2.1935 Port of Tanraig

No. in Reg. Book. Edling and Tanraig Date, First Survey 2nd February 1934 Last Survey 9th February 1935

on the Steel Drum & Drag Inlet Hooper Dredger "Chien She" (Number of Visits ✓) Tons { Gross 4699 Net 1858

Master Edling Built at Tanraig By whom built F. Schichan S. m. b. & Co Yard No. 1301 When built 1934

Engines made at Edling By whom made F. Schichan S. m. b. & Co Engine No. 3599-99 When made 1934

Boilers made at Edling By whom made F. Schichan S. m. b. & Co Boiler No. 3802-1 When made 1934

Nominal Horse Power 757 Owners Whangpo Camerang Yara Port belonging to Shanghai

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY~~ OR ~~DONKEY~~

Manufacturers of Steel Jenske Röhrenwerke A. G. Mülheim/Ruhr (Letter for Record 5)

Total Heating Surface of Boilers 1280 m² = 13630 sq. ft. (coal fired) Is forced draught fitted yes Coal or Oil fired coal & oil

No. and Description of Boilers 4 Multitubular single ended Working Pressure 200 lbs

Tested by hydraulic pressure to 350 lbs Date of test 12/12/34 No. of Certificate 112-115 Can each boiler be worked separately yes

Area of Firegrate in each Boiler 81.8 sq. feet No. and Description of safety valves to each boiler 2 Spring loaded

Area of each set of valves per boiler { per Rule 2 x 10.514 sq. in. as fitted 2 x 12, 13 sq. in. Pressure to which they are adjusted 200 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 in bunkers or woodwork Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating no Is the bottom of the boiler insulated no

Largest internal dia. of boilers 5150 mm Length 3633 mm Shell plates: Material S. M. Steel Tensile strength 57.2-59 kg/mm²

Thickness 33.5 mm Are the shell plates welded or flanged welded at ends Description of riveting: circ. seams { end double riveted inter. single riveted

long. seams double butt straps Diameter of rivet holes in { circ. seams 35 mm long. seams 38 mm Pitch of rivets { 94 mm 142 mm

Percentage of strength of circ. end seams { plate 62.7% rivets 67% Percentage of strength of circ. intermediate seam { plate 84.5% rivets 91%

Percentage of strength of longitudinal joint { rivets 91% combined 87.1% Working pressure of shell by Rules 202 lbs

Thickness of butt straps { outer 26 mm inner 19 mm No. and Description of Furnaces in each Boiler 4 Morrison

Material S. M. Steel Tensile strength 42.2-46.7 kg/mm² Smallest outside diameter 1132 mm

Length of plain part { top 160 mm bottom 160 mm Thickness of plates { crown 16 mm bottom 16 mm Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom no Working pressure of furnace by Rules 201 lbs

End plates in steam space: Material S. M. Steel Tensile strength 42.8-45.3 kg/mm² Thickness 27 mm Pitch of stays 360 x 570 mm

How are stays secured double nuts and riveted washers Working pressure by Rules 209 lbs

Tube plates: Material { front S. M. Steel back S. M. Steel Tensile strength { 43.2-45.5 kg/mm² 42.4-46.9 kg/mm² Thickness { 27 mm 25 mm

Mean pitch of stay tubes in nests 317 x 218 mm Pitch across wide water spaces 365 mm Working pressure { front 203 lbs back 306 lbs

Girders to combustion chamber tops: Material S. M. Steel Tensile strength 45.5-50.6 kg/mm² Depth and thickness of girder at centre 230 mm 2 x 20 mm Length as per Rule 860 mm Distance apart 220 mm No. and pitch of stays in each 3 at 200 mm Working pressure by Rules 210 lbs Combustion chamber plates: Material S. M. Steel

Tensile strength 42-45.9 kg/mm² Thickness: Sides 16.5 mm Back 16 mm Top 16.5 mm Bottom 16 mm

Pitch of stays to ditto: Sides 200 x 200 mm Back 200 x 210 mm Top 200 x 240 mm Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 207 lbs Front plate at bottom: Material S. M. Steel Tensile strength 42.7-45.6 kg/mm²

Thickness 15.5 mm Lower back plate: Material S. M. Steel Tensile strength 42.1-44.7 kg/mm² Thickness 14.5 mm

Pitch of stays at wide water space 500 mm Are stays fitted with nuts or riveted over nuts

Working Pressure 224 lbs Main stays: Material S. M. Steel Tensile strength 46.8-49 kg/mm²

Diameter { At body of stay, 75-70 & 60 mm No. of threads per inch 6 Area supported by each stay 2100 cm²

Working pressure by Rules 208 lbs Screw stays: Material S. M. Steel Tensile strength 43.6-46.1 kg/mm²

Diameter { At turned off part, 51-48-45-39 mm No. of threads per inch 9 Area supported by each stay 430 cm²

Working pressure by Rules 200 lbs Are the stays drilled at the outer ends not Margin stays: Diameter { At turned off part, 51-48-45 mm or Over threads 51-48-45 mm
No. of threads per inch 9 Area supported by each stay 555 cm² Working pressure by Rules 215 lbs
Tubes: Material 1. H. Steel External diameter { Plain 83 mm Stay 83 mm Thickness { 4 mm 8.96 mm No. of threads per inch 9
Pitch of tubes 109 x 109 mm Working pressure by Rules 230 lbs Manhole compensation: Size of opening in
shell plate 420 mm diam Section of compensating ring dome doubling No. of rivets and diameter of rivet holes 38 of 35 mm diam
Outer row rivet pitch at ends 100 mm Depth of flange if manhole flanged 5 Steam Dome: Material 1. H. Steel
Tensile strength 42.7-44.7 kg Thickness of shell 18 mm Description of longitudinal joint lap joint - double riveted
Diameter of rivet holes 26 mm Pitch of rivets 85 mm Percentage of strength of joint { Plate 69.72 Rivets 64.42
Internal diameter 1000 mm Working pressure by Rules 300 lbs Thickness of crown 25 mm No. and diameter of
stays 1 Inner radius of crown 1000 mm Working pressure by Rules 310 lbs
How connected to shell lap joint - double riveted Size of doubling plate under dome 1300 mm diam 26 mm thick Diameter of rivet holes and pitch
of rivets in outer row in dome connection to shell 26 mm diam p = 100 mm

Type of Superheater Smoke box superheater Manufacturers of { Tubes Deming & Co. New York N.Y. Steel castings F. H. Smith & Co. N.Y.
Number of elements 56 Material of tubes 1. H. Steel Internal diameter and thickness of tubes 20 mm x 2.5 mm
Material of headers cast steel Tensile strength 46.2-51.6 kg Thickness 20 mm Can the superheater be shut off and
the boiler be worked separately yes Is a safety valve fitted to every part of the superheater which can be shut off from the boiler yes
Area of each safety valve 960 cm² Are the safety valves fitted with easing gear yes Working pressure as per
Rules 890 lbs Pressure to which the safety valves are adjusted 210 lbs Hydraulic test pressure;
tubes 1000 lbs, castings 600 lbs and after assembly in place 600 lbs Are drain cocks or valves fitted
to free the superheater from water where necessary yes

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes

The foregoing is a correct description of the boiler and superheater forwarded herewith (If not state date of approval.)
7/14/33 19/1/34
Manufacturer.

Dates of Survey { During progress of work in shops - 2.2.21.2.23.20.3.29.3. Continued attendance at Blooming and Jamming from 4.7.34 till 6.9.2.35 p.c.d.
while building { During erection on board vessel - 4.12.19.26.6.3.10.4.
Total No. of visits 1

Is this Boiler a duplicate of a previous case not If so, state Vessel's name and Report No. 1

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) Respecting the oil fuel burning arrangement I beg to state that the arrangement remains to be examined under working condition. As stated by the Owners Representative this will be done at Shanghai where the vessel is expected to arrive at the end of March 1935.

The boiler have been under continued observation during the whole time of construction. The dimensions have been verified with those given on the approved plans and were found to be in accordance with same, the workmanship being of high quality. After completion on board the boiler have been subjected to accumulation test, showing at 15 minutes trial a rise of steam pressure of 4 lbs.

It is submitted to the favorable consideration of the Committee to place the vessel name in the Register Book with the Grade + LMC with date as may be decided by the Committee. It is submitted that a record of + LMC 2,35 be assigned p.c.d.

Survey Fee ... £ : When applied for, 19
Travelling Expenses (if any) £ : Inclusive of fee charged on hull report. 19
Please see Sydney letter dated 28.2.35

M. Hoese

Engineer Surveyor to Lloyd's Register of Shipping.

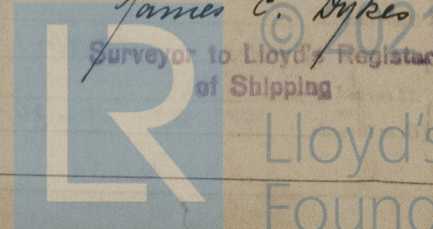
Committee's Minute

TUE. 19 MAR 1935

TUE. 27 AUG 1935

Assigned

See minute on
J.E. Inchy Rpt.



Lloyd's Register
Foundation