

REPORT ON BOILERS.

No. 236

Received at London Office TUE. APR. 22. 1913

Date of writing Report 2nd April 1913 When handed in at Local Office

Port of Bremen

No. in Survey held at Bremen

Date, First Survey 19th October 1912 Last Survey 15th March 1913

Reg. Book. 73 on the Sted Le Sr "LAUTERFELS"

(Number of Visits 8) Tons { Gross 5811
Net 3643

Master Volkmann Built at Bremen By whom built Akt. Ges. Weser When built 1913

Engines made at Bremen By whom made Akt. Ges. Weser When made 1913

Boilers made at Bremen By whom made Akt. Ges. Weser When made 1913

Registered Horse Power 520 Owners Deutsche Impf. Fabrik Ges. Hanwa Port belonging to Bremen

MULTITUBULAR BOILERS—~~MAIN, AUXILIARY OR DONKEY~~ ^{Donkey}—Manufacturers of Steel Friedr. Krupp, Essen

(Letter for record S) Total Heating Surface of Boilers 1076 \square' Is forced draft fitted no No. and Description of Boilers 1 cylindrical multitubular Working Pressure 121 ts Tested by hydraulic pressure to 182 ts Date of test 11.2.13

No. of Certificate 51 Can each boiler be worked separately yes Area of fire grate in each boiler 45.3 \square' No. and Description of safety valves to each boiler 2 spring loaded Area of each valve 7.4 \square' Pressure to which they are adjusted 121 ts

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 20" Mean dia. of boilers 144" Length 120"

Material of shell plates St. Steel Thickness .79 Range of tensile strength 28-33 Tons Are the shell plates welded or flanged yes

Descrip. of riveting: cir. seams double long. seams treble Diameter of rivet holes in long. seams 1" Pitch of rivets 6.55

Lap of plates or width of butt straps 14.6" Per centages of strength of longitudinal joint rivets 130 Working pressure of shell by rules 137 ts Size of manhole in shell 11.8 x 15.8" Size of compensating ring 33.9 x 27.2" No. and Description of Furnaces in each boiler 3 plain Material St. Steel Outside diameter 37.6" Length of plain part 90" Thickness of plates 62"

Description of longitudinal joint welded No. of strengthening rings yes Working pressure of furnace by the rules 143 ts Combustion chamber plates: Material St. Steel Thickness: Sides .57 Back .53 Top .52 Bottom .83 Pitch of stays to ditto: Sides 8.7 x 7.5 Back 8.8 x 7.1

Top 8.2 x 7.9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 137 ts Material of stays St. Steel Diameter at smallest part 2.25 Area supported by each stay 2.1 Working pressure by rules 136 ts End plates in steam space: Material St. Steel Thickness .79

Pitch of stays 15.8 x 13.8 How are stays secured double nuts Working pressure by rules 129 ts Material of stays steel Diameter at smallest part 2.25

Area supported by each stay 2.1 Working pressure by rules 138 ts Material of Front plates at bottom St. Steel Thickness .88 Material of Lower back plate St. Steel Thickness .71 Greatest pitch of stays 15.3 x 6.3 Working pressure of plate by rules 124 ts Diameter of tubes 3.25

Pitch of tubes 4.4 x 4.5 Material of tube plates St. Steel Thickness: Front .88 Back .79 Mean pitch of stays 8.9 Pitch across wide water spaces 14.4 Working pressures by rules 125 ts Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 7.2 x 1.01 Length as per rule 27 Distance apart 7.9 Number and pitch of Stays in each 2-8.2

Working pressure by rules 161 ts Superheater or Steam chest: how connected to boiler yes Can the superheater be shut off and the boiler worked separately yes Diameter yes Length yes Thickness of shell plates yes Material yes Description of longitudinal joint yes Diam. of rivet holes yes Pitch of rivets yes Working pressure of shell by rules yes Diameter of flue yes Material of flue plates yes Thickness yes

If stiffened with rings yes Distance between rings yes Working pressure by rules yes End plates: Thickness yes How stayed yes

Working pressure of end plates yes Area of safety valves to superheater yes Are they fitted with easing gear yes

VERTICAL DONKEY BOILER—

No. Description Manufacturers of steel

Made at By whom made When made Where fixed Working pressure

tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler

Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength

Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown plates

Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace

Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown plates

plates Radius of do. Stayed by Diameter of uptake Thickness of uptake plates

Thickness of water tubes

The foregoing is a correct description, **ACTIEN-GESELLSCHAFT "WESER"** Manufacturer.

Friedrich Krupp

Dates of Survey while building { During progress of work in shops - 1912. Oct 19, 29, Dec 21, 30, 1913. Jan 14, Feb 11
During erection on board vessel - 1913. Feb 25, March 15
Total No. of visits 8

Is the approved plan of main boiler forwarded herewith yes

" " " donkey " " yes



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

See Report on Machinery.

Certificate (if required) to be sent to

The amount of Entry Fee .. £	:	:	When applied for,
Special £	:	:19.....
Donkey Boiler Fee £	:	:	When received,
Travelling Expenses (if any) £	:	:19.....

G. H. C. Ham

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

Committee's Minute

FRI, APR. 25. 1913

Assigned *See Minute on attached*

J. E. R. H. Bmn 236



© 2020

Lloyd's Register Foundation