

# REPORT ON BOILERS.

No. 12292

WFD. 10 JAN. 1923

Port of Antwerp

Received at London Office

No. in Survey held at Antwerp

Date, first Survey 20 December 1922 Last Survey 8 January 1923

Reg. Book.

(Number of Visits)

64757 on the S. S. KURMARK.

Tons Gross 3737  
Net 3177

Master Bremen Built at Bremen By whom built Pickman & Co. When built 1912

Engine made at Bremen By whom made A. J. Weser. when made 1912

Boilers made at Bremen By whom made A. J. Weser. when made 1912

Registered Horse Power                      Owners Secretary of state for India in Council Port belonging to London.

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

(Letter for record) Total Heating Surface of Boilers 1875 Is forced draft fitted Yes No. and Description of Boilers 3 Multitubular Working Pressure 192 lb. Tested by hydraulic pressure to                      Date of test                     

No. of Certificate                      Can each boiler be worked separately Yes Area of fire grate in each boiler 75 sq. ft. No. and Description of safety valves to each boiler 2 Spring loaded. Area of each valve 12.17" Pressure to which they are adjusted 195 lb.

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler None

Smallest distance between boilers or uptakes and bunkers or woodwork                      Mean dia. of boilers 13' 10.5" Length 11' 11.7"

Material of shell plates                      Thickness 1.122 Range of tensile strength                      Are the shell plates welded or flanged Flanged

Descrip. of riveting: cir. seams double riv. long. seams quadruple riv. diameter of rivet holes in long. seams 1.417 Pitch of rivets 18.9"

Lap of plates or width of butt straps 27.16" Per centages of strength of longitudinal joint rivets 90. plate 92.5 Working pressure of shell by rules 190 lbs. Size of manhole in shell 11.8 x 15.76" Size of compensating ring 1.26"

boiler 3 Morrison & Co. Material                      Outside diameter 3' 5.5" Length of plain part                      Thickness of plates crown 0.53" bottom                     

Description of longitudinal joint Lap welded No. of strengthening rings None Working pressure of furnace by the rules 197.3 lb. Combustion chamber plates: Material                      Thickness: Sides 0.63" Back 0.688" Top 0.63" Bottom 0.905" Pitch of stays to ditto: Sides 7.8 x 7.5" Back 8.7 x 7.5"

Top 7.87 x 7.0" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 205 lb. Material of stays                      Diameter at smallest part 1.5" Area supported by each stay 58.58 sq. in. Working pressure by rules 241 lb. End plates in steam space: Material                      Thickness 0.905"

Pitch of stays 14 x 16.7" How are stays secured double nut Working pressure by rules 192 lb. Material of stays                      Diameter at smallest part 2.68"

Area supported by each stay 234 sq. in. Working pressure by rules 251 lb. Material of Front plates at bottom                      Thickness 1.06" Material of Lower back plate                      Thickness 0.905" Greatest pitch of stays 12.4 x 11.75" Working pressure of plate by rules 225 lb. Diameter of tubes 3"

Pitch of tubes 4.13 x 4.05" Material of tube plates                      Thickness: Front 1.06" Back 0.905" Mean pitch of stays 12.34 x 8.10" Pitch across wide water spaces 14.17" Working pressures by rules 284 lb. Girders to Chamber tops: Material                      Depth and thickness of girder at centre 9 1/4 x 3 1/8 x 2" Length as per rule 2' 6 1/2" Distance apart 7 1/8" Number and pitch of Stays in each 34 x 7 1/8 pitch

Working pressure by rules 237 lb. Superheater or Steam chest: how connected to boiler Schmidt's patent connected to front of boiler Can the superheater be shut off and the boiler worked separately Yes Diameter                      Length                      Thickness of shell plates                      Material C. S. 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 1.86 each Valve                      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                      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                      Plates                      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                     

Stayed by                      Diameter of uptake                      Thickness of uptake plates                      Thickness of water tubes                     

The foregoing is a correct description,

Manufacturer.

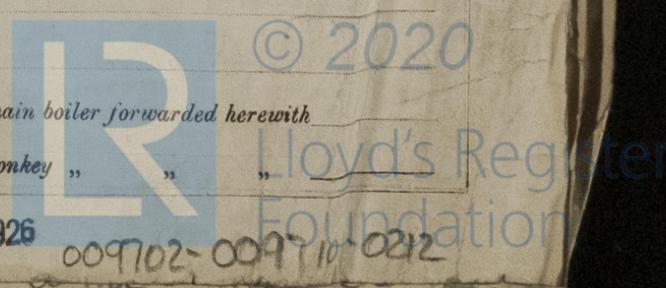
Dates of Survey while building                      During progress of work in shops                      During erection on board vessel                      Total No. of visits                     

Is the approved plan of main boiler forwarded herewith                     

FRI. 29 MAR 1927

FRI. 3 DEC 1926

009702-009710-0212



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

Plans of main boilers enclosed herewith  
 The dimensions of the boilers have been verified & found in accordance  
 with the enclosed plans.

The main boilers were examined at Glasgow in February, March  
 1922 (See letter M 22 November 1922, see Cardiff report n<sup>o</sup> 43269 for  
 adjusting of main boiler safety valves under steam pressure.

Certificate (if required) to be sent to

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

*Fee to be assigned*

*John Henderson*  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute  
 Assigned

TUE. 6 FEB. 1923  
 FRI. 29 JUN. 1923  
 FRI. 5 SEP 1924  
 FRI. 12 NOV 1926  
 FRI. 2 MAY 1924  
 TUE. DEC. 18 1923  
 TUES. 19 AUG 1924  
 FRI. DEC. 28 1923

Lloyd's Register  
 Foundation

Rpt.  
 De  
 Re  
 Has a Survey been held on the Machinery of the ship?  
 If so, is the Report sent ashore, or when will it be sent?  
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