

# REPORT ON BOILERS.

No. 29250

Received at London Office.....

Date of writing Report 27.4.1954 When handed in at Local Office 28.4.1954 Port of ANTWERP

No. in Survey held at SERING & ANTWERP Date, First Survey 26.3.53 Last Survey 5.2.1954

Reg. Book. 689 on the m/t "SALAMIS." (Number of Visits 23) Tons { Gross 2826 Net 74.35

Built at Hoboken By whom built D. A. J. M. Cockrell Yard No. 74 When built 1954

Engines made at Perain By whom made do. do. Engine No. 427 When made 1954

Boilers made at do. By whom made do. do. Boiler No. 7915/1 When made 1954

IN as per Rule Owners 10/22 P. E. Kland & A. J. Salami Port belonging to G. G.

## DONKEY

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Messrs. Rheinische Pfahnenwerke & A. A. Muellem Fabrique de Fer de Charleroi D. A. J. M. Cockrell

Total Heating Surface of Boilers 899 m<sup>2</sup> (each) 598 m<sup>2</sup> Of Superheaters 52 m<sup>2</sup> 26 m<sup>2</sup> (each)

Total for Register Book 630 m<sup>2</sup> Is forced draught fitted 2 Coal or Oil fired oil fired

No. and Description of Boilers two Multitubular aux. boilers Working Pressure 13 kg/cm<sup>2</sup>

Tested by hydraulic pressure to 21 kg/cm<sup>2</sup> Date of test 22-12-53 No. of Certificate 24-12-53 Can each boiler be worked separately 2

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler four improved high lift

Area of each set of valves per boiler { per Rule 724.8 mm<sup>2</sup> as fitted Pressure to which they are adjusted 13 kg/cm<sup>2</sup> Are they fitted with easing gear 2

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork none Is oil fuel carried in the double bottom under boilers 2

Smallest distance between shell of boiler and tank top plating none Is the bottom of the boiler insulated 2

Largest internal dia. of boilers 4787 Length 4200 Shell plates: Material S.M. steel Tensile strength 41/47 kg/mm<sup>2</sup>

If fusion welded, state name of welding Firm D. A. J. M. Cockrell Have all the requirements of the Rules for Class I vessels

been complied with 2 Thickness 25 Are the shell plates welded or flanged welded Description of riveting: circ. seams { end inter

long. seams { Diameter of rivet holes in { circ. seams long. seams Pitch of rivets {

Percentage of strength of circ. end seams { plate rivets Percentage of strength of circ. intermediate seam { plate rivets

Percentage of strength of longitudinal joint { plate rivets combined

Thickness of butt straps { outer inner No. and Description of Furnaces in each Boiler three Four - type

Material S.M. steel Tensile strength 41/47 kg/mm<sup>2</sup> Smallest outside diameter 1132

Length of plain part { top 193.5 bottom 263 Thickness of plates 17 Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom none

End plates in steam space: Material S.M. steel Tensile strength 41/47 kg/mm<sup>2</sup> Thickness 28 Pitch of stays 450 x 450

How are stays secured welded

Tube plates: Material { front S.M. steel back S.M. steel Tensile strength { 41/47 kg/mm<sup>2</sup> Thickness { 28 20

Mean pitch of stay tubes in nests 202 x 202 Pitch across wide water spaces 420 439.5

Girders to combustion chamber tops: Material S.M. steel Tensile strength 41/47 kg/mm<sup>2</sup> Depth and thickness of girder

at centre 205 - 28 Length as per Rule 70.36 Distance apart 2200 No. and pitch of stays

in each welded 50mm welded space 114 Combustion chamber plates: Material S.M. steel

Tensile strength 41/47 kg/mm<sup>2</sup> Thickness: Sides 17 Back 17 Top 17 Bottom 22

Pitch of stays to ditto: Sides 176 x 185 Back 185 x 185 Top 180 x 180 Are stays fitted with nuts or riveted over welded

Front plate at bottom: Material S.M. steel Tensile strength 41/47 kg/mm<sup>2</sup>

Thickness 28 Lower back plate: Material S.M. steel Tensile strength 41/47 kg/mm<sup>2</sup> Thickness 28

Pitch of stays at wide water space 420 Are stays fitted with nuts or riveted over welded

Main stays: Material S.M. steel Tensile strength 41/47 kg/mm<sup>2</sup>

Diameter { At body of stay 70 No. of threads per inch welded

Screw stays: Material S.M. steel Tensile strength 41/47 kg/mm<sup>2</sup>

Diameter { At turned off part 38 No. of threads per inch welded

Over threads { Not threaded (welded)

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Are the stays drilled at the outer ends. No ✓ Margin stays: Diameter At turned off part, 4.3 ✓  
No. of threads per inch. welded ✓  
Tubes: Material S.M. steel ✓ External diameter Plain 76 ✓ Thickness 4.5 ✓ No. of threads per inch. 9 ✓  
Pitch of tubes. 127 x 127 ✓ Manhole compensation: Size of opening in No. in  
shell plate. 280 x 480 ✓ Section of compensating ring. 12.5 mm ✓ No. of rivets and diameter of rivet holes. welded ✓  
Outer row rivet pitch at ends. \_\_\_\_\_ Depth of flange if manhole flanged. \_\_\_\_\_ Steam Dome: Material. none ✓  
Tensile strength. \_\_\_\_\_ Thickness of shell. \_\_\_\_\_ Description of longitudinal joint. \_\_\_\_\_  
Diameter of rivet holes. \_\_\_\_\_ Pitch of rivets. \_\_\_\_\_ Percentage of strength of joint Plate \_\_\_\_\_  
Internal diameter. \_\_\_\_\_ Thickness of crown. \_\_\_\_\_ No. and diameter of Rivets \_\_\_\_\_  
stays. \_\_\_\_\_ Inner radius of crown. \_\_\_\_\_  
How connected to shell. \_\_\_\_\_ Size of doubling plate under dome. \_\_\_\_\_ Diameter of rivet holes and pitch IN as  
of rivets in outer row in dome connection to shell. \_\_\_\_\_

Type of Superheater. Header type

Manufacturers of

Tubes. Abt. Tubes de la Meuse  
Steel forgings. do do do do  
Steel castings. do do do do

Number of elements. 30 ✓ Material of tubes. S.M. steel Internal diameter and thickness of tubes. 27 - 5.5  
Material of headers. S.M. steel Tensile strength. 41.47 kg/cm<sup>2</sup> Thickness. 21 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. 803 mm<sup>2</sup> Are the safety valves fitted with easing gear. Yes ✓  
Pressure to which the safety valves are adjusted. 13 kg/cm<sup>2</sup> Hydraulic test pressure: \_\_\_\_\_  
tubes. 70 kg/cm<sup>2</sup> forgings 70 kg/cm<sup>2</sup> and after assembly in place. 28 kg/cm<sup>2</sup> ✓ 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,

G. Chellett Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1953, March 26, June 5, 9, July 7, 14, 17 Aug. 8, 11, 30, Sept. 3, 8, 23, Oct. 24, Nov. 3, 6, Dec. 4, 11, 29  
During erection on board vessel - - - Jan. 25, 27, 29, Feb. 5 Are the approved plans of boiler and superheater forwarded herewith. (If not state date of approval.)  
Total No. of visits. 22

Is this Boiler a duplicate of a previous case. No If so, state Vessel's name and Report No. \_\_\_\_\_

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built and

installed under special survey of the Society's surveyor in accordance with

the approved plans, the Rules and the Secretary's letters. The materials and

workmanship are good. The boilers were examined under pressure, the safety

valves adjusted under steam and an accumulation test was carried out

with satisfactory results. These boilers are, in our opinion, eligible to be incorporated

in the class assigned to the machinery, subject to the safety valves of both donkey

boilers being renewed before the end of the guarantee period in September 1954.

NOTE: - The aggregate area of the two safety valves of 50 mm. dia. each, fitted in

one chest as ordered for each boiler was found insufficient. Time did not permit

new safety valves being supplied and as a temporary measure four safety valves,

two in one chest, were fitted on a forged steel branch piece connected to the boiler.

It was agreed with the Owner and the Builders that two new safety valves of

suitable dimensions and to be connected direct to the boiler shell, would be fitted

before the end of the guarantee period in September 1954.

Survey Fee ... .. £ : 48 : When applied for, ..... 19.....  
Travelling Expenses (if any) £ SEE RPT. : : When received ..... 19.....

G. Tanqueray 11/7/53.  
Engineer Surveyor to Lloyd's Register of Shipping.

FRIDAY 9 - JUL 1954

Committee's Minute \_\_\_\_\_

Assigned See Rpt. 48