

# REPORT ON BOILERS.

No. 94395

Received at London Office 16 OCT 1929 27 NOV 1930

Date of writing Report 16 OCT 1929 When handed in at Local Office 16 OCT 1929 Port of London

No. in Reg. Book Survey held at Hitchin Date, First Survey 6<sup>th</sup> SEPTEMBER Last Survey Feb 11<sup>th</sup> 1929

on the M.V. "Kola Agung" (Number of Visits 4) Gross 7331 Tons Net 4601

Built at Rotterdam By whom built Messrs Maats Sijmwood Yard No. 317 When built 1929

Engines made at Rotterdam By whom made " Engine No. " When made "

Boilers made at " By whom made " Boiler No. " When made "

Owners Rotterdamse Lloyd Port belonging to Rotterdam

## VERTICAL DONKEY BOILER.

Made at Hitchin By whom made Spence-Hopwood Boiler No. 9880 When made 1929 Where fixed Engine room

Manufacturers of Steel Stewart & Lytle

Heating Surface of Boiler 464 sq ft Is forced draught fitted no Coal or Oil fired oil

Description of Boilers One Spence-Hopwood Patent Working pressure 100 lbs

Tested by hydraulic pressure to 200 lbs per sq in Date of test Feb 11<sup>th</sup> 1929 No. of Certificate 1346

Number of Firegrate in each Boiler 1 No. and Description of safety valves to each boiler 2 spring loaded

Weight of each set of valves per boiler per rule 9.8 lb Pressure to which they are adjusted 100 lbs Are they fitted with easing gear Yes

Whether steam from main boilers can enter the donkey boiler no Smallest distance between boiler or uptake and bunkers woodwork

Is oil fuel carried in the double bottom under boiler no Smallest distance between base of boiler and tank top plating Is the base of the boiler insulated

Largest internal dia. of boiler 6'-0" Height 11'-7"

Shell plates: Material Steel Tensile strength 28-32 Thickness 15/32

Are the shell plates welded or flanged no Description of riveting: circ. seams SR Lap long. seams Double End Lap

Number of rivet holes in circ. seams 7/8 Pitch of rivets 2 2/32 Percentage of strength of circ. seams plate 54% of Longitudinal joint plate 70%

Working pressure of shell by rules 126 Thickness of butt straps outer 1/2 inner 1/2

Crown: Whether complete hemisphere, dished partial spherical, or flat Flat Material Steel

Tensile strength 26-30 Thickness 3/4 Radius no Working pressure by rules 100

Description of Furnace: Plain, spherical, or dished crown Plain Material Steel Tensile strength 26-30

Thickness 3/4 External diameter top 26-30 Length as per rule no Working pressure by rules 100

Number of support stays circumferentially no and vertically no Are stays fitted with nuts or riveted over no

Diameter of stays over thread no Radius of spherical or dished furnace crown no Working pressure by rule 100

Thickness of Ogee Ring no Diameter as per rule no Working pressure by rule 100

Combustion Chamber: Material Steel Tensile strength 26-30 Thickness of top plate 3/4

Radius if dished no Working pressure by rule 100 Thickness of back plate no Diameter if circular no

Length as per rule no Pitch of stays no Are stays fitted with nuts or riveted over no

Diameter of stays over thread no Working pressure of back plate by rules 100

Tube Plates: Material Steel Tensile strength 26-30 Thickness 3/4 Mean pitch of stay tubes in nests 20 stay tubes

If comprising shell, Dia. as per rule no Pitch in outer vertical rows no Dia. of tube holes FRONT stay BACK stay

Is each alternate tube in outer vertical rows a stay tube no Working pressure by rules 100

Girders to combustion chamber tops: Material Steel Tensile strength 26-30

Depth and thickness of girder at centre no Length as per rule no

Distance apart no No. and pitch of stays in each no Working pressure by rule 100

**Crown stays:** Material \_\_\_\_\_ Tensile strength \_\_\_\_\_ Diameter { at body of stay, \_\_\_\_\_ or over threads \_\_\_\_\_ }  
 No. of threads per inch \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_

**Screw stays:** Material \_\_\_\_\_ Tensile strength \_\_\_\_\_ Diameter { at turned off part, \_\_\_\_\_ or over threads \_\_\_\_\_ } No. of threads per inch \_\_\_\_\_  
 Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Are the stays drilled at the outer ends \_\_\_\_\_

**Tubes:** Material *Solid Brown Steel* External diameter { plain *2 1/4* stay *2 1/4* } Thickness { *11 Swg.* *1/4"* }  
 No. of threads per inch *11* Pitch of tubes *3 1/4 x 3* Working pressure by rules *100 lbs.*

**Manhole Compensation:** Size of opening in shell plate *16 x 12* Section of compensating ring *2' 2" dia x 9/16* No. of rivets and diameter of rivet holes *32 - 7/8* Outer row rivet pitch at ends *4 5/8* Depth of flange if manhole flanged \_\_\_\_\_

**Uptake:** External diameter *2' 3"* Thickness of uptake plate *3/4"*

**Cross Tubes:** No. \_\_\_\_\_ External diameters { \_\_\_\_\_ } Thickness of plates \_\_\_\_\_

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with *Yes*

**SPENCER-HOPWOOD, LTD.:**  
 The foregoing is a correct description,  
*J. Bradley* Manufacturer.  
**WORKS MANAGER**

Dates of Survey { During progress of work in shops - - } *1929. SEP 6-13-20 Oct 11* Is the approved plan of boiler forwarded herewith (If not state date of approval.) *Yes*  
 { During erection on board vessel - - } \_\_\_\_\_ Total No. of visits *4 (in shops)*

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

*This boiler has been built under special survey in accordance with the plan & the Society's Rules. The material has been tested by the Society's Laboratory. The workmanship is good. On completion the boiler was tested by hydraulic pressure to 200 lbs per sq. inch without showing any signs of weakness or defect.*

*The boiler is stamped: — No. 1346  
 Hydro test  
 200 lbs  
 W.P. 100 lbs  
 11-10-29. H.P.C.*

Survey Fee ... .. £ *4 : 4 :* } When applied for, *18 OCT 1929*  
 Travelling Expenses (if any) £ *1 - : 0 - 4* } When received, *18.10.29 NW*

*J. J. Ochoa* *H. P. Cornish*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE. 4 NOV 1930*  
 Assigned *See F.E. Rpt*

