

REPORT ON BOILERS.

No. 11348

Received at London Office

7 OCT 1941

Report ^{p.m.} 20th August 1941 When handed in at Local Office 19 Port of Copenhagen

Survey held at Elsinore Date, First Survey 23rd October 1940 Last Survey 20th August 1941

the Steel Single Screw Motor Vessel "EROS" (Number of Visits 22) Tons { Gross - Net - }

Elsinore By whom built a/s Helsingers Fenstils- og Maskinbyggeri Yard No. 266 When built 1941

at Elsinore By whom made _____ Engine No. 374 When made 1941

at Elsinore By whom made _____ Boiler No. 982 When made 1941

Bederi a/s Helsingborg Port belonging to Helsingborg

LOCAL DONKEY BOILER.

By whom made a/s Helsingers Fenstils- og Maskinbyggeri Boiler No. 982 When made 1941 Where fixed In the engine casing upper deck!

Makers of Steel Woods Steel Company, Raymond, Delaware
Rind's Steel Works, Copenhagen.

Heating Surface of Boiler 291 sq. ft. 27 m² 147 sq. ft. 13.63 m² exhaust fired 144 sq. ft. 13.37 m² oil Is forced draught fitted no Coal or Oil fired oil exhaust

Description of Boilers one off combined oil exhaust fired (Cochran type) Working pressure 100 lbs/sq. in.

Hydraulic pressure to 200 lbs/sq. in. Date of test 28.3.1941 No. of Certificate 670

Regulate in each Boiler _____ No. and Description of safety valves to each boiler 2 off direct spring loaded & 4 1/2" dia.

Each set of valves per boiler { per rule 1.91 sq. in. as fitted 2.92 sq. in. Pressure to which they are adjusted 100 lbs/sq. in. Are they fitted with easing gear yes

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

Is oil fuel carried in the double bottom under boiler _____ Smallest distance between base of boiler and tank top plating _____

Is the base of the boiler insulated yes Largest internal dia. of boiler 4'-6" Height 12' 6"

Material S.M. Steel Tensile strength 28.5 - 29.3 lbs/sq. in. Thickness 7/16" 1/2"

Shell plates welded or flanged no Description of riveting: circ. seams { end lap joint inter. single riveting long. seams lap joint double riveting

Net holes in { circ. seams 23/32" Pitch of rivets 1 13/16" Percentage of strength of circ. seams { plate 42.3 rivets 60.3 of Longitudinal joint { rivets 63.5 (combined) 56.9

Pressure of shell by rules 137.3 lbs/sq. in. Thickness of butt straps { outer _____ inner _____

Form: Whether complete hemisphere, dished partial spherical, or flat dished partial spherical Material S.M. Steel

Strength 29.3 lbs/sq. in. Thickness 3/4" Radius 4'-6" Working pressure by rules 137.2 lbs/sq. in.

Form of Furnace: Plain, spherical, or dished crown spherical Material S.M. Steel Tensile strength 27.4 lbs/sq. in.

Thickness 1/2" External diameter { top _____ bottom _____ Length as per rule _____ Working pressure by rules 183.3 lbs/sq. in.

Are support stays circumferentially _____ and vertically _____ Are stays fitted with nuts or riveted over _____

Number of stays over thread _____ Radius of spherical or dished furnace crown 22 1/2" Working pressure by rule 183.3 lbs/sq. in.

Thickness of Ogee Ring 5/8" Diameter as per rule { D 54" d 45" Working pressure by rule 104 lbs/sq. in.

Combustion Chamber: Material _____ Tensile strength _____ Thickness of top plate _____

Is it dished _____ Working pressure by rule _____ Thickness of back plate _____ Diameter if circular _____

As per rule _____ Pitch of stays _____ Are stays fitted with nuts or riveted over _____

Number of stays over thread _____ Working pressure of back plate by rules _____

Plates: Material { front S.M. Steel Tensile strength 27.2 lbs/sq. in. Thickness 1 1/16" Mean pitch of stay tubes in nests 7 7/8" 9 3/8"

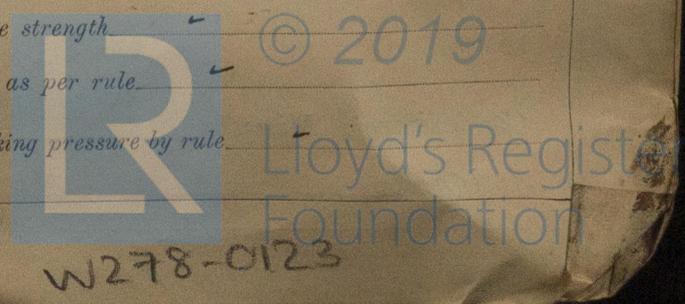
Comprising shell, Dia. as per rule { front 47.5" 48.5" Pitch in outer vertical rows { UPPER: 25 1/8" LOWER: 3 1/8" Dia. of tube holes FRONT { stay 1 1/2" LOWER FRONT stay 2" BACK { plain 1 1/2" BACK plain 2"

Do alternate tube in outer vertical rows a stay tube yes Working pressure by rules { front 125.7 lbs/sq. in. back 152.1 lbs/sq. in.

Stays to combustion chamber tops: Material _____ Tensile strength _____

Length and thickness of girder at centre _____ Length as per rule _____

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



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
 EXHAUST - OIL FIRED
 plain $1\frac{1}{2}$ " 2 "
 stay $1\frac{1}{2}$ " 2 " Thickness $11/32$ "
 EXH SWG 10

Tubes: Material S. M. Steel External diameter
 No. of threads per inch 9 Pitch of tubes EXHAUST 2 5/8" OIL FIRED 3 1/8" Working pressure by rules 215 lbs / 10
 TOP END

Manhole Compensation: Size of opening in shell plate 16" x 12" Section of compensating ring mm No. of rivets mac
 of rivet holes 28 Outer row rivet pitch at ends Depth of flange if manhole flanged 3" on

Uptake: External diameter Thickness of uptake plate

Cross Tubes: No. External diameters Thickness of plates

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

The foregoing is a correct description
 ARTIESELSKABET
 HELSINGORS JERNSKIBS OG MASKINBYGGERI
 Baldingensen

Dates of Survey while building
 During progress of work in shops - 23/10 - 10/11 - 3/12 - 12/12 - 30/12/1940 - 14/1 - 24/1 - 3/2 - 21/2 - 27/2 - 28/3 - 4/4
 During erection on board vessel - 2/5 - 10/6 - 12/6 - 14/6 - 23/6 - 9/7 - 25/7 - 29/7 - 7/8 - 13/8 - 16/8 - 20/8 - 4/9
 Is the approved plan of boiler forwarded herewith (If not state date of approval.) yes
 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.) The above described boiler has been constructed and fitted under Special Survey in accordance with the Rules, the approved plans and to our satisfaction. The material used in construction has been tested as required by the Rules and the workmanship is good.

Survey Fee £ 100.00 When applied for, 19.....
 Travelling Expenses (if any) £ : : When received, 19.....

FRI. 31 OCT 1941

Committee's Minute [Redacted]
 Assigned See Opn G.C. 11348

J. Laughlin
 Engineer Surveyor to Lloyd's Register of Shipping
 Lloyd's Register Foundation