

REPORT ON AIR RECEIVER BOILERS.

No. 47

Received at London Office

Date of writing Report 6TH DEC 1929 When handed in at Local Office 10 Port of LENINGRAD

No. in Reg. Book 18343 on the M/S "COOPERATZIA" Survey held at LENINGRAD Date, First Survey 6/8/1929 Last Survey 6TH DEC 1929
(Number of Visits 4) Tons Gross 3767.2
Net 2164.4

Built at LENINGRAD By whom built SEVERNEY S. B. YARD Yard No. 307 When built 1929
Engines made at LENINGRAD By whom made RUSSIAN DIESEL WORKS Engine No. 307 When made 1929
Boilers made at LENINGRAD By whom made SEVERNEY S. B. YARD Boiler No. 307 When made 1929
Owners SOVTORGFLOT Port belonging to LENINGRAD

AIR RECEIVER FOR SYREN & FUEL SERVICE TO DONKEY BOILERS.
~~VERTICAL DONKEY BOILER.~~

Made at LENINGRAD By whom made SEVERNEY SHIPBUILDING YD. RECEIVER No. RECEIVER When made 1929 Where fixed E. R. TWEEN DECK.
Manufacturers of Steel MARIUOPOL STATE STEEL WORKS

Total Heating Surface of Boiler Is forced draught fitted Coal or Oil fired
No. and Description of Boilers RECEIVER ONE RIVETED STEEL AIR RECEIVER Working pressure 13.5 kg/cm²
Tested by hydraulic pressure to 24 kg/cm² Date of test 10TH OCT. 1929 No. of Certificate 1034

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler RECEIVER ONE SPRING LOADED.
Area of each set of valves per boiler per rule APPROVED 20/7 Pressure to which they are adjusted NOT ADJUSTED Are they fitted with easing gear NO

State whether steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers or woodwork
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 Largest internal dia. of boiler RECEIVER 595 mm Height 1692 mm

Shell plates: Material STEEL Tensile strength 44/51 kg/cm² Thickness 10 mm
Are the shell plates welded or flanged NO Description of riveting: circ. seams end. SINGLE long. seams D. R. LAP.

Dia. of rivet holes in circ. seams 20 mm long. seams 15.5 mm Pitch of rivets 49.5 mm 50.5 mm Percentage of strength of circ. seams plate 59.5% rivets 55.7% of Longitudinal joint plate 67.3% rivets 69.5% combined

Working pressure of shell by rules 20.3 kg/cm² 18.8 Thickness of butt straps outer inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat DISHED PARTIAL SPHERICAL Material STEEL
Tensile strength 41/47 kg/cm² Thickness 10 mm Radius 585 mm Working pressure by rules 18 kg/cm²

Description of Furnace: Plain, spherical, or dished crown Material Tensile strength _____
Thickness _____ External diameter top _____ Length as per rule _____ Working pressure by rules _____
Pitch of support stays circumferentially _____ and vertically _____ Are stays fitted with nuts or riveted over _____
Diameter of stays over thread _____ Radius of spherical or dished furnace crown _____ Working pressure by rule _____
Thickness of Ogee Ring _____ Diameter as per rule D _____ Working pressure by rule _____

Combustion Chamber: Material _____ Tensile strength _____ Thickness of top plate _____
Radius if dished _____ Working pressure by rule _____ Thickness of back plate _____ Diameter if circular _____
Length as per rule _____ Pitch of stays _____ Are stays fitted with nuts or riveted over _____
Diameter of stays over thread _____ Working pressure of back plate by rules _____

Tube Plates: Material front _____ Tensile strength _____ Thickness _____ Mean pitch of stay tubes in nests _____
If comprising shell, Dia. as per rule front _____ Pitch in outer vertical rows _____ Dia. of tube holes FRONT stay _____ BACK stay _____
plain _____ plain _____
Is each alternate tube in outer vertical rows a stay tube _____ Working pressure by rules front _____ back _____

Girders to combustion chamber tops: Material _____ Tensile strength _____
Depth and thickness of girder at centre _____ Length as per rule _____
Distance apart _____ No. and pitch of stays in each _____ Working pressure by rule _____



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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 _____

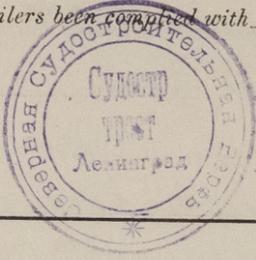
Tubes: Material _____ External diameter { plain _____ stay _____ Thickness { _____
 No. of threads per inch _____ Pitch of tubes _____ Working pressure by rules _____

Manhole Compensation: Size of opening in shell plate _____ Section of compensating ring _____ No. of rivets and diameter of rivet holes _____
 Outer row rivet pitch at ends _____ Depth of flange if manhole flanged _____

Uptake: External diameter _____ Thickness of uptake plate _____

Cross Tubes: No. _____ External diameters { _____ Thickness of plates _____

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



The foregoing is a correct description,

A. Speransky 9. 11. 28 Manufacturer

Dates of Survey { During progress of work in shops - - 6/8/29, 24/11/29
 while building { During erection on board vessel - - 28/11/29, 6/12/29

RECEIVED
 Is the approved plan of boiler forwarded herewith 13/10/28.
 (If not state date of approval.)
 Total No. of visits 4

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

This air receiver has been constructed under special survey in accordance with the rules and approved plans. The materials and workmanship are sound and good, the receiver has now been fitted on board the vessel in an efficient manner. The safety valve on this receiver has not been adjusted on account of the reducing valve from the 50 kg/cm² starting air receivers not being in working order, the builders hope to have this attended too on the vessels return to Leningrad.

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

A. M. Crivick
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 17 DEC 1929

FRI. 15 AUG 1930

Assigned

See Report attached

FRI. 3 JAN 1930 FRI. 11 JUL 1930

FRI. 14 FEB 1930

TUE. 2 MAR 1930