

REPORT ON ^{AIR RECEIVER} BOILERS.

No. 47

Received at London Office

Date of writing Report 6TH DEC. 1929 When handed in at Local Office 19 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) } Gross 3767.2
Tons } 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. THREE DECK.
Manufacturers of Steel MARIOPOL 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 Pitch of rivets 49.5 mm Percentage of strength of circ. seams plate 59.5% of Longitudinal joint plate 67.3%
long. seams 15.5 mm 50.5 mm rivets 55.7% rivets 69.5% combined

Working pressure of shell by rules 20.3 kg/cm² 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 d

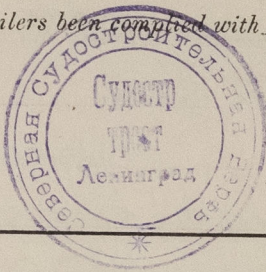
Combustion Chamber: Material Tensile strength Thickness of top plate
Radius if dished Working pressure by rule Thickness of back plate Diameter if circular
Length as per rule Pitch of stays Are stays fitted with nuts or riveted over
Diameter of stays over thread Working pressure of back plate by rules

Tube Plates: Material front Tensile strength Thickness Mean pitch of stay tubes in nests
back
If comprising shell, Dia. as per rule front Pitch in outer vertical rows back 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

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 _____ Thickness { _____
 stay _____
 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,
Alperansky 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
 Is the approved plan of ^{RECEIVER} 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 80 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
 Assigned *See Report attached*

FRI. 15 AUG 1930
 FRI. 3 JAN 1930 FRI. 11 JUL 1930
 FRI. 14 FEB 1930
 TUE. 25 MAR 1930