

In joints in which the number of rivets in the outer rows is one-half of the number in each of the inner rows, the distance between the outer rows and the next rows, and the distance between the rows in which there are the full number of rivets, should be—

Zigzag riveting: Distance between outer rows with half number of rivets and next rows = $0.2p + 1.15d$; distance between rows in which are full number of rivets = $0.165p + 0.67d$.

Chain riveting: Distance between outer rows with half number of rivets and next rows = $0.33p + 0.67d$, or $2d$, whichever is the greater; distance between rows in which are full number of rivets = $2d$.

18. *Maximum Pitch of Rivets in Longitudinal Joints*.—The maximum pitch of the rivets in the longitudinal joints of receiver shells is to be—

$$\text{Maximum pitch in inches} = C \times T + 1\frac{1}{8} \text{ in.}$$

where T is the thickness of the plate in inches, and C is a coefficient as given in the following table:—

No. of Rivets per Pitch.	Coefficients for Lap Joints.	Coefficients for Double Butt Strapped Joints.
1	1.31	1.75
2	2.62	3.50
3	3.47	4.63
4	4.14	5.52
5	..	6.00

This section shall not apply to seams which are welded and fitted with a riveted butt strap as in Section 15.

19. *Riveting of Circumferential Seams*.—The circumferential seams of receivers, when the ends are not supported by stays, shall have a strength of not less than 50 per cent. of that required for the longitudinal seam. When the ends of receivers are supported by stays, and the stays are sufficient to carry one-half of the total load on the ends, the strength of the circumferential seams shall not be less than 35 per cent. of that required for the longitudinal seams.

20. *Rule for Working-pressure of Seamless and Forge-welded Receivers*.—The working-pressure of the cylindrical shell of a seamless or forge-welded receiver shall be calculated from the following formula:—

$$\text{W.P.} = \frac{C \times (t - 2)}{D}$$

where W.P. is the working-pressure in pounds per square inch; *t* is the thickness of the shell in thirty-seconds of an inch; C = 800 for seamless receivers; C = 550 for forge-welded receivers.

21. *Minimum Thickness of Plates*.—The thickness of the plates of a receiver shall not be less than as follows:—

	Minimum Thickness of Plates.
Riveted receivers	$\frac{3}{16}$ in.
Forge-welded receivers	$\frac{1}{4}$ in.
Autogenously welded or brazed receivers—	
For a diameter of shell not exceeding 14 in. ..	$\frac{1}{8}$ in.
For diameters over 14 in. and not exceeding 20 in. ..	$\frac{3}{16}$ in.

22. *Flat Plates supported by Screwed Stays*.—The working-pressure to be allowed on flat plates supported by stays fitted with nuts is to be calculated by the following formula:—

$$\text{W.P.} = \frac{C \times t^2}{p^2}$$

where W.P. is the working-pressure in pounds per square inch;
t is the thickness of the flat plate in thirty-seconds of an inch;
p is the maximum pitch of the stays in inches;
 C = 40 for stays screwed into the plate and fitted with a nut on the outside, or for stays not screwed into the plate and fitted with nuts on both sides of the plate;
 C = 45 for stays fitted with nuts inside and outside the plate, and with washers on the outside of the plate of a diameter not less than three times the diameter of the stay and of a thickness not less than two-thirds the thickness of the plate;