

Maximum Allowable Design Stresses for ASME Boiler and Pressure Vessel Code (Section VIII, Div 1, 1B)

Temperature °F	718 [N07718]	LDX 2101® [S32101]*	2205 [S31803]	ZERON® 100 [S32760]	AL-6XN® [N08367]	625 [N06625]	Alloy 20 [N08020]	Alloy X [N06002]	686 [N06686]
Min. Tensile Strength, ksi	-	101*	90	-	95	120	80	95	100
Min. Yield Strength, ksi	-	77*	65	-	45	60	35	35	45
-20 to 100	37.0	28.9	25.7	31.1	27.1	34.3	22.9	23.3	28.6
200	36.0	28.9	25.7	31	26.2	34.3	20.6	23.3	28.6
300	35.2	27.5	24.8	29.4	23.8	34.3	19.7	23.3	28.2
400	34.6	26.5	23.9	29	21.9	33.6	18.9	23.3	27.2
500	34.2	26.5	23.3	29	20.5	32.9	18.2	22.3	26.5
600	33.8	26.5	23.1	29	19.4	32.4	17.7	21.2	25.9
650	-	-	-	-	19.0	32.1	17.5	20.7	25.7
700	33.6	-	-	-	18.6	31.8	17.4	20.3	25.4
750	33.5	-	-	-	18.3	31.5	17.2	20.1	25.2
800	33.3	-	-	-	18.0	31.2	16.8	19.9	24.9
850	33.1	-	-	-	-	30.9	-	19.7	-
900	32.9	-	-	-	-	30.6	-	19.6	-
950	32.6	-	-	-	-	30.3	-	19.5	-
1000	32.3	-	-	-	-	29.9	-	19.4	-
1050	32.0	-	-	-	-	29.5	-	19.3	-
1100	30.7	-	-	-	-	29	-	17.5	-
1150	29.5	-	-	-	-	21	-	14.1	-
1200	-	-	-	-	-	13.2	-	11.3	-
1250	-	-	-	-	-	-	-	9.3	-
1300	-	-	-	-	-	-	-	7.7	-
1350	-	-	-	-	-	-	-	6.1	-
1400	-	-	-	-	-	-	-	4.8	-
1450	-	-	-	-	-	-	-	3.8	-
1500	-	-	-	-	-	-	-	3.0	-
1550	-	-	-	-	-	-	-	2.3	-
1600	-	-	-	-	-	-	-	1.7	-
1650	-	-	-	-	-	-	-	1.2	-
NOTES:	Case 1993-6 See T Bolting	Case 2418-1	G32 Plate	Case 2245-1	-	G22, G23, T16	-	G4, G5, T15	G5

* Cold finished and heat treated (t < 0.0187 inch)