

ASTM Standards - Pressure Vessels Plates

No.	Title	Grade	Chemical Composition %					Treatment ⁽⁵⁾
			(maxima unless stated)					
			C	Si	Mn	P	S	
A285 - 90	Pressure vessel plates, carbon steel, low and intermediate tensile strength	A	0.17	-	0.90	0.035	0.035	-
		B	0.22					
		C	0.28					
A515 - 90	Pressure vessel plates, carbon steel, for intermediate and higher temperature service	55	0.20	0.15/0.40	0.90	0.035	0.035	HR
			0.22					N
			0.24					
			0.26					
			0.28					
		60	0.24	0.15/0.40	0.90	0.035	0.035	HR
			0.27					N
			0.29					
			0.31					
			0.31					
		65	0.28	0.15/0.40	0.90	0.035	0.035	HR
			0.31					N
			0.33					
			0.33					
			0.33					
		70	0.31	0.15/0.40	1.20	0.035	0.035	HR
			0.33					N
			0.35					
			0.35					
			0.35					
A516 - 90	Pressure vessel plates, carbon steel, for moderate and lower temperature service	55	0.18	0.15/0.40	0.60/0.90 ⁽²⁾	0.035	0.035	HR
			0.20		0.60/1.20			HR or N ⁽³⁾
			0.22					N
			0.24					
			0.26					
		60	0.21	0.15/0.40	0.60/0.90 ⁽²⁾	0.035	0.035	HR
			0.23		0.85/1.20			HR or N ⁽³⁾
			0.25					N
			0.27					
			0.27					
		65	0.24	0.15/0.40	0.85/1.20	0.035	0.035	HR
			0.26					HR or N ⁽³⁾
			0.28					N
			0.29					
			0.29					
		70	0.27	0.15/0.40	0.85/1.20	0.035	0.035	HR
			0.28					HR or N ⁽³⁾
			0.30					N
			0.31					
			0.31					
A516 - 90	Pressure vessel plates, carbon steel, for moderate and lower temperature service	55LTV	0.18	0.15/0.40	0.60/0.90 ⁽²⁾	0.035	0.035	N
			0.20		0.60/1.20			
			0.22					
			0.24					
			0.26					
		60LTV	0.21	0.15/0.40	0.60/0.90 ⁽²⁾	0.035	0.035	N
			0.23		0.85/1.20			
			0.25					
			0.27					
			0.27					
		65LTV	0.24	0.15/0.40	0.85/1.20	0.035	0.035	N
			0.26					
			0.28					
			0.29					
			0.29					
		70LTV	0.27	0.15/0.40	0.85/1.20	0.035	0.035	N
			0.28					
			0.30					
			0.31					
			0.31					