



Cutting your studs...and costs.

Mechanical Requirements

Carbon Alloy & Stainless Steel ASTM A320/ASME SA320 For Low Temperature Service

Grade	Diameter, in	Heat Treatment	Tensile Strength, min ksi	Yield Strength, min, 0.2% offset, ksi	Elongation in 4D min, %	Reduction of Area min, %	Hardness, Max	Minimum Tempering Temperature, °F
L7	2-1/2 and under	Quenched and tempered	125	105	16	50	321 HBW or 35 HRC	1100 °F
B8	All diameters	Carbide solution treated	75	30	30	50	223 HDW or 96 HRB	
B8 Class 2	3/4 and under	Carbide solution treated and strain hardened	125	100	12	35	321 HBW or 35 HRC	
	Over 3/4 to 1, incl.		115	80	15	30	321 HBW or 35 HRC	
	Over 1 to 1-1/4, incl.		105	65	20	35	321 HBW or 35 HRC	
	Over 1-1/4 to 1-1/2, incl.		100	50	28	45	321 HBW or 35 HRC	
B8M	All diameters	Carbide solution treated	75	30	30	50	223 HDW or 96 HRB	
B8M Class 2	3/4 and under	Carbide solution treated and strain hardened	110	95	15	45	321 HBW or 35 HRC	
	Over 3/4 to 1, incl.		100	80	20	45	321 HBW or 35 HRC	
	Over 1 to 1-1/4, incl.		95	65	25	45	321 HBW or 35 HRC	
	Over 1-1/4 to 1-1/2, incl.		90	50	30	45	321 HBW or 35 HRC	

DISCLAIMER: Please note that this information is produced for general information purposes only. Please consult the appropriate material specification to ensure the specific information you require is accurate.