

MECHANICAL REQUIREMENTS (A193 / A193M) – INCH SIZE

Grade	Diameter, in.	Minimum Tempering Temperature, °F	Tensile Strength, min, ksi	Yield Strength, min, 0.2% offset, ksi	Elongation in 4D, min, %	Reduction of Area, min, %	Hardness, max
B7 Chromium-molybdenum	2½ and under	1100	125	105	16	50	321 HB or 35 HRC
	over 2½ to 4	1100	115	95	16	50	321 HB or 35 HRC
	over 4 to 7	1100	100	75	18	50	321 HB or 35 HRC
B7M ^A Chromium-molybdenum	4 and under	1150	100	80	18	50	235 HB or 99 HRB
	over 4 to 7	1150	100	75	18	50	235 BHN or 99HRB

^A To meet the tensile requirements, the Brinell hardness shall be over 200 HB (93 HRB)