



ASTM A193/A194M Gr B7

Chromium-Molybdenum Alloy Steel

ASTM A193 Grade B7 is a material specification for low alloy chromium-molybdenum steel, used for manufacturing of bolts, studs, stud bolts and other fasteners for bolting pressure vessels, valves, flanges and fittings for various process industries across major industrial sectors.



Chemical Composition (Carbon Steel) %

Element	C	Cr	Mn	Ni	P	S	Mo	Si
Min	0.38	0.8	0.75				0.15	0.15
Max	0.48	1.1	1		0.035	0.04	0.25	0.35

Mechanical Properties

Size Diameter (INCH) ==>		2 1/2 and under	over 2 1/2 to 4	over 4 to 8
Ultimate Tensile Strength, ksi		125 (860)	115 (760)	110 (690)
0.2% Yield strength, ksi (Mpa)		105 (720)	75 (655)	80 (515)
% Elongation (min)		16	16	18
% Reduction of Area (min)		50	50	50
Hardness HRC		35	35	35
Description/s		THREAD ROD		
Size		3/8" to 4", M2-M90		
Surface Treatment		PLAIN ,Corroshield PTFE, COLD GALVANIZED , HDG, ZINC...		
Thread spec		ASME B1.1/ASME B1.13M		
Dimensional Specs		ASME B18.31.2/B18.31.1M		

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