

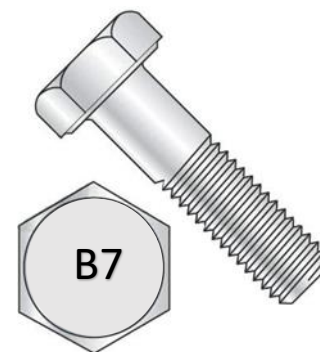


HEAVY HEX BOLT ASTM A193-B7

Chromium Molybdenum (AISI 4140)

Chemical Requirements

	<u>Range</u>	<u>Variation</u>
➤ Carbon max	0.37-0.49	0.02
➤ Manganese max	0.65-1.10	0.04
➤ Phosphorus max	0.035	0.005 over
➤ Sulfur max	0.040	0.005 over
➤ Silicon	0.15-0.35	0.02 over
➤ Chromium	0.75-1.20	0.05
➤ Nickel	0.15-0.25	0.02



Mechanical Requirements

➤ Yield Strength (KSI)	105
➤ Tensile Strength (KSI)	125
➤ Elongation (%)	16
➤ Reduction of Area (%)	50

Dimensional Data

- Grade B bolts shall have a heavy hex bolt dimensions as given in the latest of ASNI/ASME B 18.2.1 page C1.
- Having a class 2A tolerance
- Unless otherwise specified, threads shall be the coarse thread series as specified in the lasts issue on ANSI/ASME B1.1, page A-26
- Unless otherwise specified Grade B bolts should be used with heavy hex nuts.

