

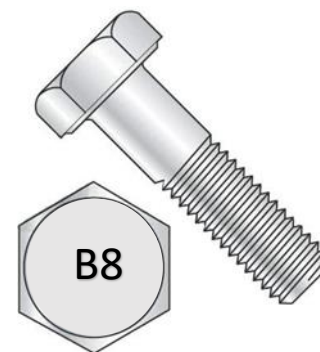


HEAVY HEX BOLT ASTM A193-B8

Unestablished 18 Chromium 8 Nickel (AISI Type 304) Carbide Solution Treated

Chemical Requirements

	<u>Range</u>	<u>Variation</u>
➤ Carbon max	0.08	0.01
➤ Manganese max	2.00	0.04
➤ Phosphorus max	0.045	0.010 over
➤ Sulfur max	0.030	0.005 over
➤ Silicon	1.00	0.05 over
➤ Chromium	18-20	0.20
➤ Nickel	8.00-10.5	0.15



Mechanical Requirements

➤ Hardness Brinell	min	223
➤ Hardness Rockwell	min	96
➤ Tensile strength (KSI)	min	75
➤ Yield Strength (KSI)	min	30
➤ Reduction of Area (%)		50
➤ Elongation (%)		30

Dimensional Data

- All bolts and nuts should be in a heavy pattern.
- Unless otherwise specified in the purchase order, shall be threaded in accordance with ANSI/ASME B1.1, page A-26, class 2A fit.
- Bolt heads shall be in accordance with the dimensions of ANSI/ASME B18.2.1, page C-1.
- Additional information can be found in ASTM A193/A193M, DTD 1998 (Alloy Steel and Stainless-steel Bolting Materials for High-Temperature Services) and in ASTM A194/A194M, DTD 1998 (Carbon and Alloy Steel Nuts for Bolts for High-Temperature Services).

