

HEAVY HEX BOLT GRADE B8M T316 CLASS II

SUBMITTAL SPECIFICATIONS ABSTRACT OF ASTM A193 / ASTM A194

CHEMICAL REQUIREMENTS

Chemical analysis shall be performed in accordance with ASTM A751

	CARBON MAX	MANGANESE MAX	PHOPHOROUS MAX	SULFUR MAX	SILICON MAX	CHROMIUM	NICKEL	MOLYBDENUM
RANGE	0.085	2.00	0.045	0.03	1.00	16.0 to 18.0	10.0 to 14.0	2.00 to 3.00
VARIATION	0.01 OVER	0.04 OVER	0.010 OVER	0.005 OVER	0.05 OVER	0.20	0.15	0.10

MECHANICAL REQUIREMENTS

	HARDNESS ROCKWELL MIN	HARDNES BRINELL MIN	TENSILE STRENGTH (KSI) MIN	YIELD STRENGTH (KSI) MIN	PRODUCTION OF AREA (%)	ELONGATION (%)
< 3/4	35	321	110	95	45	15
> 3/4	35	321	110	80	45	20

GRADE: 18 Chromium, 10 Nickel, 2 Molybdenum (ANSI Type 316)

Carbide Solution Treated and Strain Hardened

Heavy Hex Nuts ASTM A194 8M (ASME B18.2.2)

LOCATION

Buried Submerged Above Grade Below Grade Other

DIMENSIONAL DATA: All bolts and nuts should be heavy pattern unless otherwise specified in the purchase order. Parts 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: Additional information can be found in ASTM A193 / A193M, DTD 1998 (alloy steel and stainless bolting materials for high temperature services) and in ASTM A194 / A194M, DTD 1998 (carbon and alloy steel nuts for bolts for high temperature services)