

## **ASTM A193 B7 SUBMITTALS**



## Abstract of ASTM A193 / ASTM A194

## GRADE: CHROMIUM MOLYBDENUM (AISI 4140) CHEMICAL REQUIREMENTS

Chemical analysis shall be performed in accordance with ASTM A751

	CARBON	MANGANESE	PHOSPHOROUS MAX	SULFER MAX	SILICON	CHROMIUM	MOLYBDEDMIUM
RANGE	0.37 - 0.49	0.65 - 1.10	0.035	0.040	0.15 - 0.35	0.75 - 1.20	0.15 - 0.25
VARIATION	0.02	0.04	0.005 OVER	0.005 OVER	0.02	0.05	0.02

## MECHANICAL REQUIREMENTS

YIELD STRENGTH KSI	REDUCTION OF AREA %	TENSILE STRENGTH (KSI)	ELONGATION %
105	50	125	16

Heavy Hex Nuts Grade 2H ASTM A194	Washers ASTM F436 Hardened Steel
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DIMENSIONAL DATA: All bolts and nuts should be heavy pattern and threaded in accordance with ANSI/ASME B1.1, any bolts larger than 1" shall be 8-pitch.

ADDITIONAL INFORMATION: Additional information can be found in the full specification from ASTM A193 / A193M.