

# ALL THREAD ROD GRADE A193 B7

## SUBMITTAL SPECIFICATIONS Abstract of ASTM A193 / ASTM A194

Grade: CHROMIUM LYBDENUM (AISI 4140)

### CHEMICAL REQUIREMENTS

Chemical analysis shall be performed in accordance with ASTM A751

	CARBON	MANGANESE	PHOPHOROUS MAX	SULFUR MAX	SILICON	CHROMIUM	MOLYBDENUM
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

### STUDS AND NUTS MAY BE SUPPLIED

☐ Plain    ☐ Zinc Plated    ☐ Hot Dip Galvanized    ☐ Teflon Coated

### LOCATION

☐ Buried    ☐ Submerged    ☐ Above Grade    ☐ Below Grade    ☐ Other

**DIMENSIONAL DATA:** Sizes 1 inch and smaller in diameter with the coarse-thread series, and the 1 1/8 inch and larger in diameter with the 8-pinch thread series unless otherwise specified by the customer.

**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, DD 1998 (carbon and alloy steel nuts for bolts for high temperature services).