

# ALL THREAD ROD T316 STAINLESS STEEL

SUBMITTAL SPECIFICATIONS  
Abstract of ASTM F593 & F594

GRADE: 18 CHROMIUM, 10 NICKEL, 2 MOLYBDENUM (ANSI T-316)

## CHEMICAL REQUIREMENTS

Chemical analysis shall be performed in accordance with ASTM A751

| CARBON<br>MAX | MANGANESE<br>MAX | PHOPHOROUS<br>MAX | SULFUR<br>MAX | SILICON<br>MAX | CHROMIUM     | NICKEL       | MOLYBDENUM   |
|---------------|------------------|-------------------|---------------|----------------|--------------|--------------|--------------|
| 0.08          | 2.00             | 0.045             | 0.030         | 1.00           | 16.0 to 18.0 | 10.0 to 14.0 | 2.00 to 3.00 |

## MECHANICAL REQUIREMENTS

| HARDNESS<br>ROCKWELL<br>MIN | TENSILE STRENGTH<br>(KSI)<br>(1/4" to 5/8" DIA)<br>MIN MAX |     | TENSILE STRENGTH<br>(KSI)<br>(3/4" to 1 1/2" DIA)<br>MIN MAX |     | YIELD STRENGTH<br>(KSI)<br>MIN | ELONGATION<br>(%) |
|-----------------------------|------------------------------------------------------------|-----|--------------------------------------------------------------|-----|--------------------------------|-------------------|
| B80-C32                     | 100                                                        | 150 | 85                                                           | 140 | 45                             | 25                |

|                                                                |                                                                      |
|----------------------------------------------------------------|----------------------------------------------------------------------|
| <input type="checkbox"/> Hex Nuts ASTM F594 (ASME B18.2.2)     | <input type="checkbox"/> Heavy Hex Nuts ASTM F594 (ASME B18.2.2)     |
| <input type="checkbox"/> Hex Nuts ASTM F594 Teflon Coated Blue | <input type="checkbox"/> Heavy Hex Nuts ASTM F594 Teflon Coated Blue |
| <input type="checkbox"/> T-316 Stainless Steel Washers         |                                                                      |

## LOCATION

|                                 |                                    |                                      |                                      |                                |
|---------------------------------|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------|
| <input type="checkbox"/> Buried | <input type="checkbox"/> Submerged | <input type="checkbox"/> Above Grade | <input type="checkbox"/> Below Grade | <input type="checkbox"/> Other |
|---------------------------------|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------|

**DIMENSIONAL DATA:** Unless otherwise specified in the purchase order, parts shall be the coarse threaded series as specified in the latest issue of ANSI / ASME B18.2.1, page C-1 or Hex Cap Screws (Finished Hex Bolts).

**ADDITINOAL INFORMATION:** Additional information can be found in ASTM F-593, DTD 1998 (Stainless Steel Bolts, Hex Cap Screws) and in ASTM F-594, DTD 1998 (Stainless Steel Nuts).