

17-4PH fasteners are primarily used for their superior high strength. This precipitation hardened stainless steel alloy offers up to 4x the strength of 316 steel and 2.5x the strength of Super Duplex 2507. 17-4PH bolts are available in several different heat treatments (as well as annealed condition) which provide different levels of tensile and yield strength, as well as elongation and hardness. 17-4PH maintains its strength to 600°F.

Properties

| Ultimate Tensile Strength | 160-210 ksi | | | |
|---------------------------|---------------|--|--|--|
| Yield Strength at 0.2% | 150-200 ksi | | | |
| Elongation % | 7-11 | | | |
| Usable Temperature Limit | 600°F / 316°C | | | |

Key Benefits

- Extreme high strength stainless steel alloy.
- 4x stronger than 316 stainless
- 2.5x stronger than Super Duplex 2057
- Usable to 600°F
- Available in several heat treatments for different levels of strength

Chemistry & Specifications

| 17-4PH | Fe | Cr | Ni | Cu | Mn | Si | Мо | Nb+Ta | U | Р | S |
|--------|-----|------|-----|-----|-----|-----|------|-------|------|------|------|
| Min % | - | 15.0 | 3.0 | 3.0 | - | - | - | - | - | - | - |
| Max % | Bal | 17.5 | 5.0 | 5.0 | 1.0 | 1.0 | 0.50 | 0.45 | 0.07 | 0.04 | 0.03 |

SPECIFICATIONS: UNS S17400, AISI 630, ASTM A564-630, Werkstoff 1.4542, AMS 5604 Sheet, Strip and Plate, ASTM A 693 Plate

Material Data

| 17-4 PH - Tensile Data vs Aged Condition | | | | | | | | | |
|--|--------------------------------|--|-----------------|----------------------------------|--|--|--|--|--|
| Aged Condition | Ultimate Tensile (min. ksi) | Yield Strength at 0.2% Offset (min. ksi) | Elongation % | Hardness Rc (Rockwell C, min) | | | | | |
| H900 | 195 | 170 | 10 | 40 | | | | | |
| H925 | 175 | 155 | 10 | 38 | | | | | |
| H1025 | 155 | 145 | 12 | 35 | | | | | |
| H1075 | 145 | 125 | 13 | 32 | | | | | |
| H1100 | 140 | 115 | 14 | 31 | | | | | |
| H1150 | 135 | 105 | 16 | 28 | | | | | |
| H1150-M | 115 | 75 | 18 | 24 | | | | | |
| H1150-D | 125 | 105 | 16 | 24/33 max | | | | | |

Our Engineers Are Here to Help