15-7PH
Technical Datasheet
Precipitation Hardening Stainless Steel

Typical Applications
• Tooling in the Aerospace Industry
• CNC components
• Gauge making
• General tooling
• Bulkheads
• Retaining rings
• Springs

Product Description
15-7 PH is a semi-austenitic precipitation-hardening stainless steel which combines high strength with hardness. The alloy has good corrosion resistance and minimum distortion when heat-treated. It is easily formed in the annealed condition, in the heat-treated condition 15-7 PH provides excellent mechanical properties at temperatures up to 900°F (482°C). Corrosion resistance is good and in certain environments, corrosion resistance mirrors chromium-nickel stainless steels. 15-7PH is weldable by common fusion and resistance methods but has a poor weldability rating when compared to 17-4PH.

Key features
• High strength and hardness
• Easily formed in annealed condition
• Good corrosion resistance
• Poorer weldability than 17-4

Availability
Bar

Corrosion resistance
Good

Weldability
Welding is by fusion and resistance methods. The alloy offers poorer weldability than 17-4.

Chemical Composition (weight %)

<table>
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<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Cr</th>
<th>Ni</th>
<th>Mo</th>
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Physical Properties

- Melting Point: 2550 - 2640°F (1400 – 1450°C)
- Density: 0.282 lbs/in³ / 7.8 g/cm³
- Modulus of Elasticity in Tension: 29.0 x 106 psi / 200 GPa

Technical Assistance
Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

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