

California Metal & Supply Inc.

ISO9001 & AS9100 Certified Company, Founded 1984
Titanium, Inconel, Nickel, Aluminum, A286, Stainless

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DATA SHEET: 17-4 Stainless Steel

17-4 PH Stainless Steel features good corrosion resistance, hardness, toughness and strength. 17-4 PH Stainless Steel is a very widely used precipitation hardened alloy with a toughness especially suited for industrial applications.

Applications: Stainless Steel Alloy 17-4 is used in industrial applications, especially for the aerospace, nuclear energy, and chemical processing industries.

Composition for 17-4 PH Stainless Steel

Element	Typical	
	Composition (Weight Percent)	
Carbon		0.04
Manganese		0.40
Phosphorus		0.020
Sulfur		0.005
Silicon		0.50
Chromium		15.5
Nickel		4.5
Columbium + Tantalum		0.30
Copper		3.50
Iron		Balance

Mechanical Properties Per 17-4 PH Stainless Steel AMS 5643, AMS 5604

Condition	Yield Strength				Ultimate Tensile Strength				Elongation (%)	(Rockwell) Hardness
	psi	MPa	psi	MPa	psi	MPa	psi	MPa		
A	110,000	760	150,000	1,030	8	33 (C)				
H 950	180,000	1,240	195,000	1,340	10	43 (C)				
H 1075	160,000	1,100	190,000	1,310	10	42 (C)				
H 1150	160,000	1,100	190,000	1,310	10	42 (C)				