



17-4PH

(UNS S17400) W. Nr. 1.4542 Type 630

Chemical composition	Cu	Nb+ Ta	Si	p	Fe	S	Mn	Cr	Ni	C
% Present (Max)	3.00 -5.0 0	0.15 -0.4 5	1.00	0.0 45	Bal	0.03 5	1.00	15.0 -17.5 0	3.0- 5.0	0.07

Alloy 17-4PH (UNS S17400), Type 630, is a chromium-nickel-copper precipitation-hardening martensitic stainless steel with an addition of niobium. 17-4PH combines high strength and hardness with good corrosion resistance. The alloy is furnished in the solution annealed condition (Condition A). It should not be used at temperatures above 572°F (300°C) or for cryogenic service. Optimal mechanical properties can be obtained by subjecting the alloy to age hardening heat treatments. Heat treatment in the 900°F (482°C) range produces the highest strength. The corrosion resistance of Alloy 17-4PH is comparable to 304 stainless steel in most environments, and is generally superior to the 400 series stainless steels. It is used in applications where the combination of moderate corrosion resistance and unusually high strength are required. Alloy 17-4PH can be easily welded and processed by standard shop fabrication practices. It is magnetic.

Note: Values are in accordance with EN 10088 specifications. Actual mill certs available upon request.

