

# ER630 (17-4PH) Data Sheet

## **Specifications:**

AWS A5.9 AWS Class ER630 ASME SFA 5.9 UNS S17480

### **Properties:**

**Tensile Strength:** 150,000 psi **Yield Strength:** 135,000 psi

**Elongation:** 10-25% (depending on condition)

## **Description:**

ER630 is designed primarily for welding precipitation hardening stainless steels; it is modified to prevent the formation of ferrite networks in the martensitic microstructure which have deleterious effect on mechanical properties. ER630 is a precipitation hardening stainless steel that is used in welding high strength stainless steels of similar composition. ER630 properties listed above are greatly influenced by heat treatment.

#### Available in multiple sizes and diameters

## Chemical Composition (Wt%)

Si	Mn	Cu	Mo	S	Ni	Cr	P	С	Nb+Ta
0.75	0.25- 0.75		0.75	0.03	4.5- 5.0	16.0- 16.75	0.03	0.05	0.15- 0.30

Note: Single values are maximum unless otherwise noted.

Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

**CAUTION:** Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standards A49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33126: OSHA Safety and Health Standards 29 CRF 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.