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# **ERNiCrMo-13 DATA SHEET**

Pinnacle Alloys ERNiCrMo-13 (59) AWS CLASS ERNiCrMo-13 CODE AND SPECIFICATION DATA: AWS A5.14 ASME SFA 5.14

### **DESCRIPTION:**

Pinnacle Alloys ERNiCrMo-13 is a nickel-chromium-molybdenum alloy with extra low carbon and silicon contents. It offers excellent corrosion resistance, high mechanical strength, and better thermal stability. Because of its low silicon and carbon contents and no tungsten, Pinnacle Alloys ERNiCrMo-13 is not prone to grain-boundary precipitation during hot forming and welding. Pinnacle Alloys ERNiCrMo-13 is well suited for welding in a wide variety of chemical processing facilities in both oxidizing and reducing media. This wire provides exceptional weldability and very low sensitivity to hot cracking.

**DIAMETERS:** .035", .045", 1/16", 3/32", 1/8", 5/32"

# **TYPICAL DEPOSIT COMPOSITION (Wt %):**

Aluminum (Al)	0.20
Carbon (C)	0.005
Chromium (Cr)	23.0
Iron (Fe)	0.50
Manganese (Mn)	0.30
Molybdenum (Mo)	16.0
Nickel (Ni)	59.0
Phosphorous (P)	0.01
Silicon (Si)	0.005
Sulfur (S)	0.003

# TYPICAL MECHANICAL PROPERTIES:

Ultimate Tensile Strength (psi)	110,000 psi
Percent Elongation	45%



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### **TYPICAL WELDING PARAMETERS:**

	Diameter	Amperage	Volts	Shielding Gas
GTAW	1/16"	80-110		100% Ar
	3/32"	90-130		
	1/8"	120-175		
	5/32"	150-220		
GMAW	.035"	150-190	26-29	
	.045"	180-220	28-32	75% Ar/ 25% He
	1/16"	200-250	29-33	
SAW	3/32"	275-350	28-30	Suitable Flux
	1/8"	350-450	29-32	

**NOTICE:** The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for the use in the field. The manufacturer disclaims any warranty of merchantability of fitness for any particular purpose with respect to its products.

**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, 550 NW LeJune Road, Miami, FL 33126: OSHA Safety and Health Standards 29 CRF 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.

Pinnacle Alloys MSDS sheet may be obtained at <u>www.pinnaclealloys.com</u>.