

**Pinnacle Alloys are products of SOWESCO** 

# **E2209-16 DATA SHEET**

Pinnacle Alloys E2209-16
AWS CLASS E2209-16
CODE AND SPECIFICATION DATA:
AWS A5.4 ASME SFA 5.4; UNS W39209

### **DESCRIPTION:**

Pinnacle Alloys E2209-16 is designed for joining 22% chromium duplex stainless steels, including 2205, for applications with service temperatures up to 480°F (250°C) and down to -58°F (-50°C). Pinnacle Alloys E2209-16 provides high resistance to general corrosion, pitting, stress corrosion, and intergranular corrosion. Pinnacle Alloys E2209-16 has good resistance to stress corrosion cracking, especially in environments containing hydrogen sulfide and chlorides.

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

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

Carbon (C)	0.03
Chromium (Cr)	23.0
Copper (Cu)	0.75 max
Manganese (Mn)	1.20
Molybdenum (Mo)	3.20
Nickel (Ni)	9.60
Nitrogen (N)	0.17
Phosphorous (P)	0.04 max
Silicon (Si)	1.00 max
Sulfur (S)	0.03 max

#### **TYPICAL MECHANICAL PROPERTIES:**

Ultimate Tensile Strength (psi) 109,000 psi Percent Elongation 25%

## **TYPICAL WELDING PARAMETERS:**

Diameter	Length —	Amperage	
		Flat	Vertical & Overhead
3/32"	12"	70-85	65-75
1/8"	14"	85-110	80-90
5/32"	14"	110-140	100-120
3/16"	14"	120-160	110-130

**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 www.pinnaclealloys.com.