



Pinnacle Alloys are products of SOWESCO

## E308/308L-16 DATA SHEET

### Pinnacle Alloys E308/308L-16

AWS CLASS E308-16, E308L-16

#### CODE AND SPECIFICATION DATA:

AWS A5.4 ASME SFA 5.4; UNS W30810 (308) & UNS W30813 (308L)

#### DESCRIPTION:

Pinnacle Alloys E308/308L-16 is used for welding similar materials such as AISI grades 301, 302, 304, and 305. With a maximum 0.04% carbon content, this electrode reduces the possibility of intergranular carbide precipitation and increases the resistance to intergranular corrosion. Pinnacle Alloys E308/308L-16's characteristics make this electrode the smart choice for nuclear and general structural welding, as well as for food, pharmaceutical, and brewery equipment applications.

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

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

|                 |          |
|-----------------|----------|
| Carbon (C)      | 0.03     |
| Chromium (Cr)   | 20.0     |
| Copper (Cu)     | 0.75 max |
| Manganese (Mn)  | 1.00     |
| Molybdenum (Mo) | 0.75 max |
| Nickel (Ni)     | 10.0     |
| Phosphorous (P) | 0.04 max |
| Silicon (Si)    | 1.00 max |
| Sulfur (S)      | 0.03 max |

#### TYPICAL MECHANICAL PROPERTIES:

Ultimate Tensile Strength (psi) 85,000 psi  
Percent Elongation 42%

#### 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 CFR 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](http://www.pinnaclealloys.com).