



Pinnacle Alloys are products of SOWESCO

## ENi-CI DATA SHEET

### Pinnacle Alloys ENi-CI (99)

AWS CLASS ENi-CI

#### CODE AND SPECIFICATION DATA:

AWS A5.15 ASME SFA 5.15

#### DESCRIPTION:

Pinnacle Alloys ENi-CI is used for welding cast irons to other cast irons as well as for joining cast irons to mild steels and stainless steels. It is also readily used for the repair of castings. The welds are generally more machinable than a Pinnacle Alloys ENiFe-CI (55) deposit. A preheat and inter-pass temperature of not less than 350°F is required during welding to prevent cracking.

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

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

|                |       |
|----------------|-------|
| Aluminum (Al)  | 0.06  |
| Carbon (C)     | 0.50  |
| Copper (Cu)    | 0.20  |
| Iron (Fe)      | 1.20  |
| Manganese (Mn) | 0.10  |
| Nickel (Ni)    | 97.5  |
| Silicon (Si)   | 0.20  |
| Sulfur (S)     | 0.002 |

#### TYPICAL MECHANICAL PROPERTIES:

|                                 |                      |
|---------------------------------|----------------------|
| Ultimate Tensile Strength (psi) | 72,000 psi (500 MPa) |
| Yield Strength (psi)            | 56,500 psi (390 MPa) |
| Percent Elongation              | 5%                   |

#### 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  | 110-120             |

**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](http://www.pinnaclealloys.com).