



ISO 9001:2015 REGISTERED
Certificate No.: 50040 & 50415

ERNiCrFe-CI DATA SHEET

Pinnacle Alloys ERNiCrFe-CI (55)

Currently there is no AWS classification for this product.

DESCRIPTION:

Pinnacle Alloys ERNiCrFe-CI is used for welding of cast irons to other cast irons as well as for joining cast irons to mild steels. It is also readily used for the repair of castings. The welds are moderately hard and require carbide tipped tools for machining. A preheat and inter-pass temperature of not less than 350°F (175°C) is required during welding to prevent cracking.

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

TYPICAL DEPOSIT COMPOSITION (Wt %):

| | |
|----------------|-------|
| Aluminum (Al) | 0.005 |
| Carbon (C) | 0.01 |
| Copper (Cu) | 0.02 |
| Iron (Fe) | 44.5 |
| Manganese (Mn) | 0.50 |
| Nickel (Ni) | 54.0 |
| Silicon (Si) | 0.10 |
| Sulfur (S) | 0.002 |

TYPICAL MECHANICAL PROPERTIES:

| | |
|---------------------------------|------------|
| Ultimate Tensile Strength (psi) | 89,500 psi |
| Yield Strength (psi) | 62,000 psi |
| Percent Elongation | 35% |

www.pinnaclealloys.com

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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 | 75% Ar/ 25% He |
| | .045" | 180-220 | 28-32 | |
| | 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 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.

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