Pinnacle Alloys

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# E6022 DATA SHEET

**Pinnacle Alloys E6022**
AWS CLASS E6022
**CODE AND SPECIFICATION DATA:**
AWS A5.1

**DESCRIPTION:**
Pinnacle Alloys E6022 is designed for welding roof decking to support beams and other similar applications where burn-through spot welds with full penetration are required. It is also designed to weld through galvanized or painted roof decking and can also be used on plated and dirty decking. Pinnacle Alloys E6022 is an excellent choice for burn-through spot welds for roof decking and sheet metal and for rapid downhill welding when joining light gauge materials.

**FEATURES:**
- Smooth, easy to control arc
- Excellent strike and re-strike
- Penetrating arc
- Low spatter level
- Light slag

**BENEFITS:**
- Better control of spot nugget
- Reliable starts and restarts, no rework
- Strong, reliable welds
- Less clean up, good bead appearance
- Faster clean up

**TYPE OF CURRENT:** Direct Current Electrode Positive (DCEP), AC, or Direct Current Electrode Negative (DCEN)

**DIAMETERS:** 1/8”, 5/32”

**STORAGE & RECONDITIONING:** After opening, store at 60°F to 100°F and below 50% relative humidity or in a holding oven at 100°F to 120°F. Reconditioning should be for one hour at 250°F to 300°F.

**RECOMMENDED WELDING TECHNIQUES:**

| | |
|---|---|
| Arc Length | - Short arc or drag technique |
| Flat | - Using dragging technique, angle electrodes 10-15° from 90° |
| Vertical Up | - Not recommended |
| Vertical Down | - Using dragging technique, angle electrodes 10-15° from 90° |
| Overhead | - Not recommended |

**TYPICAL DEPOSIT COMPOSITION:**

| | Weld Metal Analysis (%) | AWS Spec (max) |
|---|---|---|
| Carbon (C) | 0.04 | Not required |
| Manganese (Mn) | 1.17 | Not required |
| Phosphorous (P) | 0.013 | Not required |
| Silicon (Si) | 0.15 | Not required |
| Sulfur (S) | 0.013 | Not required |

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## TYPICAL MECHANICAL PROPERTIES:

| | As Welded | AWS Spec (min) |
|---|---|---|
| Ultimate Tensile Strength | 65,000 psi (450 MPa) | 60,000 psi (414 MPa) |
| Yield Strength | Not required | Not required |
| Percent Elongation in 2” | Not required | Not required |
| Reduction of Area | Not required | Not required |

## TYPICAL WELDING PARAMETERS:

| Diameter | Type of Power | Amperage | Volts | Deposition Rate (lbs/hr) | Deposition Efficiency % | Amperage Range |
|---|---|---|---|---|---|---|
| 1/8” | **DCEP, AC, or DCEN** | **140** | **32** | **2.22** | **56.3** | 110-150 |
| 5/32” | **DCEP, AC, or DCEN** | **170** | **34** | **3.03** | **62.0** | 150-180 |

**NOTE: Optimum conditions are in boldface type. For out of position welding, decrease amperage by 15%. Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of steel being welded.**

**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.