

## Arcaloy MC409Nb

Arcaloy MC409Nb is a 12% Cr alloy metal cored electrode stabilized with Niobium (Nb) to improve corrosion resistance, increase strength at high temperatures and promote a ferritic microstructure.

### Specifications

|                        |                         |
|------------------------|-------------------------|
| <b>Classifications</b> | SFA/AWS A5.22 : EC409Cb |
| <b>Welding Current</b> | DC+                     |
| <b>Alloy Type</b>      | MC409Nb                 |

### Typical Weld Metal Analysis %

|          |           |           |           |           |
|----------|-----------|-----------|-----------|-----------|
| <b>C</b> | <b>Mn</b> | <b>Si</b> | <b>Cr</b> | <b>Nb</b> |
| 0.02     | 0.5       | 0.6       | 11.7      | 0.6       |

### Deposition Data

| Diameter            | Current | Voltage | Wire Feed Speed            |
|---------------------|---------|---------|----------------------------|
| 1.2 mm ( .045 in. ) | 200 A   | 20 V    | 533 cm/min ( 210 in./min ) |
| 1.2 mm ( .045 in. ) | 215 A   | 21 V    | 584 cm/min ( 230 in./min ) |
| 1.2 mm ( .045 in. ) | 234 A   | 22 V    | 635 cm/min ( 250 in./min ) |
| 1.2 mm ( .045 in. ) | 290 A   | 24 V    | 762 cm/min ( 300 in./min ) |
| 1.2 mm ( .045 in. ) | 323 A   | 24 V    | 889 cm/min ( 350 in./min ) |

### Recommended Welding Parameters

| Current   | Wire Diameter           | Voltage | Wire Feed Speed                         |
|-----------|-------------------------|---------|-----------------------------------------|
| 200-323 A | 1.2 mm<br>( 0.045 in. ) | 20-24 V | 5.33-8.89 mm/min<br>( 210-350 in./min ) |