**NI 99**

**DESCRIPTION:** NI 99 is designed for welding of gray iron castings to themselves as well as joining them to mild steels or stainless steels. It is also used extensively to repair castings. The welds are quite machinable. A preheat and interpass temperature of not less than 350°F is recommended during welding.

**APPROVALS:** Manufactured under Quality System approved by ASME, IS09001. Meets AWS A5.15, Class ENi-Cl.

### CHEMICAL COMPOSITION

- Carbon: .85
- Manganese: .25
- Silicon: 1.73
- Iron: 4.2
- Copper: 1.5
- Nickel: 91.50
- Sulfur: .005
- Phosphorus: .015

### MECHANICAL PROPERTIES

- **Tensile Strength:** 72,000 PSI, 500 MPA
- **Yield Strength:** 56,500 PSI, 390 MPA
- **Elongation:** 5%

### WELDING PARAMETERS

- **Direct Current**
- **Electrode + Ve**

### AMPERAGES:

<table>
<thead>
<tr>
<th>Size</th>
<th>Amperage</th>
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<tbody>
<tr>
<td>3/32&quot;</td>
<td>65-75</td>
</tr>
<tr>
<td>1/8&quot;</td>
<td>90-105</td>
</tr>
<tr>
<td>5/32&quot;</td>
<td>120-135</td>
</tr>
<tr>
<td>3/16&quot;</td>
<td>135-155</td>
</tr>
</tbody>
</table>

(For vertical welding amperages are to be reduced by 10 to 15 amps)

Weldcote Metals believes this data to be accurate and to reflect qualified expert opinion regarding current research. However, Weldcote Metals can not make any expressed or implied warranty as to this information.