ALLOY DESCRIPTION AND APPLICATION;

USA 11018M low-alloy steel electrodes are used to weld quenched and tempered steels with tensile strengths of up to 110,00 psi such as ASTM A514 and A517, HY80, T-1, HY100 and SSS-100. It has a smooth running arc that deposits very high tensile strength, which may be used in any position, but they are particularly suited for horizontal and downhand welding. This low hydrogen, iron powder electrode produces a fast efficient medium penetration X-ray quality weld deposit with an easy removable slag.

TYPICAL WELDING PROCEDURES; DCEP & AC

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Amps (Flat)</th>
<th>Amps (Vertical &amp; Overhead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/32”</td>
<td>55-85</td>
<td>50-80</td>
</tr>
<tr>
<td>1/8”</td>
<td>90-130</td>
<td>80-120</td>
</tr>
<tr>
<td>5/32”</td>
<td>140-190</td>
<td>110-150</td>
</tr>
<tr>
<td>3/16”</td>
<td>180-230</td>
<td>130-190</td>
</tr>
<tr>
<td>1/4”</td>
<td>250-300</td>
<td></td>
</tr>
</tbody>
</table>

Procedures may vary with change in position, base metals, filler metals, equipment and other changes.

TYPICAL WELD METAL CHEMISTRY (%) & PROPERTIES

- Carbon 0.08
- Manganese 1.49
- Silicon 0.41
- Chromium 0.32
- Nickel 1.86
- Molybdenum 0.32
- Elongation in 2”(%) 23%
- Yield Strength (psi) 104,000
- Tensile Strength (psi) 120,000
- Charpy V-notch at -60°F 44 ft·lbs


SPECIFICATIONS; ANSI/AWS A5.5 E11018M

ASME SFA 5.5 E11018M

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