Steel Wires Bare
Alloy: WW70S-2
Class: ER70S-2
Conforms to Certification: AWS A5.18
ASME SFA A5.18

Alloy: ER70S-2
Weld Process: Mig and Tig Welding Process

AWS Chemical Composition Requirements
C = 0.07 max  Ni = 0.15 max  Cu = 0.50 max
Mn = 0.90 – 1.40  Cr = 0.15 max  Ti = 0.05 – 0.15
Si = 0.40 – 0.70  Mo = 0.15 max  Zr = 0.02 – 0.12
P = 0.025 max  V = 0.03 max  Al = 0.05 – 0.15
S = 0.035 max

Recommended Weld Parameters

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Volts</th>
<th>Amps</th>
<th>IPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHORT ARC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.030</td>
<td>16 – 18</td>
<td>75 – 125</td>
<td>176 – 324</td>
</tr>
<tr>
<td>.035</td>
<td>15 – 18</td>
<td>100 – 160</td>
<td>132 – 228</td>
</tr>
<tr>
<td>.045</td>
<td>17 – 18</td>
<td>160 – 120</td>
<td>149 – 208</td>
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<tr>
<td>SPRAY ARC</td>
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<td></td>
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</tr>
<tr>
<td>.030</td>
<td>26 – 28</td>
<td>200</td>
<td>560</td>
</tr>
<tr>
<td>.035</td>
<td>27 – 29</td>
<td>250</td>
<td>504</td>
</tr>
<tr>
<td>.045</td>
<td>28 – 31</td>
<td>265</td>
<td>336</td>
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<tr>
<td>.052</td>
<td>29 – 31</td>
<td>300 – 340</td>
<td>280 – 350</td>
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<tr>
<td>1/16</td>
<td>30 – 36</td>
<td>350 – 400</td>
<td>220 – 280</td>
</tr>
</tbody>
</table>

Deposited Chemical Composition % (Typical)
C = 0.05  P = 0.012  Al = 0.09
Mn = 1.15  Ti = 0.06  Cu = 0.35
Si = 0.45  S = 0.012  Zr = 0.04
Ni = 0.01  Cr = 0.02  Mo = 0.01

Deposited All Weld Metal Properties %
As-Welded
Tensile Strength 74,800psi
Yield Strength 62,000psi
Elongation 24%

Application
Type ER70S-2 is a triple deoxidized steel welding wire for tig and mig welding applications.
For Mig welding use Carbon Dioxide or Argon + CO₂ or Argon + 2% Oxygen as shielding gases.
For Tig welding use 100% Argon.

If additional information is needed Contact Weldwire Company, Inc. 800-523-1266