COR™ STAIN 630 FC

DESCRIPTION
COR™ STAIN 630 FC is a flux-cored, 17-4 precipitation hardening stainless steel wire. 630 FC is a martensitic type alloy, which combines high strength and hardness with excellent corrosion resistance. This alloy can be hardened by a single low-temperature heat treatment.

APPLICATIONS
630 is typically used to join 17-4PH, 15-5PH, and 17-7PH stainless steels. Specific uses include pump parts, shafts, flexible bellows, marine, and aerospace applications.

PROCEDURE
A preheat is not required. Minimize heat input. Multipass weldments may require an anneal for uniform hardness. Age harden at 900°F for 1 hour and air cool.

WELDING PARAMETERS

<table>
<thead>
<tr>
<th>Size</th>
<th>Type</th>
<th>Volts</th>
<th>Amps</th>
<th>Stickout</th>
<th>Shielding Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>.045”</td>
<td>FC-G</td>
<td>23-27</td>
<td>140-180</td>
<td>1/2”</td>
<td>CO₂ or 75Ar%-25%CO₂</td>
</tr>
<tr>
<td>1/16”</td>
<td>FC-G</td>
<td>24-28</td>
<td>200-250</td>
<td>1/2”</td>
<td>CO₂ or 75Ar%-25%CO₂</td>
</tr>
</tbody>
</table>

MECHANICAL PROPERTIES
Hardness: 31 Rc as welded
41 Rc age hardened at 900°F

CLASSIFICATION
17-4 Precipitation Hardening Stainless Steel