TUNGSTEN CARBIDE TUBULAR ELECTRODE
Postalloy® 220HD contains increased levels of tungsten carbide compared to Postalloy® 219HD, with additional chrome and cobalt for toughness. The unique blend of Tungsten Carbide and Chrome provides a high polish in service to reduce the coefficient of friction. When protection against severe abrasion is needed, Postalloy® 220HD is an ideal choice.

- Excellent AC or DC operation
- Low amperage and high metal recovery - no slag to chip. Postalloy® 220HD is over 90% efficient.
- High deposition rates - up to 3 times faster than ordinary electrodes
- Moisture resistant coating, even under severe weather or high humidity

Specifications

Product Type
Flux-coated Tubular Electrode alloyed with Tungsten Carbide, Cobalt and Chrome

Weld Deposit Properties
Average 2 Layer Hardness: 64-68Rc
Tungsten Carbide Hardness: 75Rc
Deposit thickness: 2 layers
Relief checks readily to prevent stress build-up.

Applications

Conveyor screws and augers
Cutter and dredge teeth
Mixer paddles and blades
Shredder and anvil knives

Bucket pin ends
Coal and cement fans
Tamping tools

Postalloy® 220HD Welding Parameters

Current: AC or DC Reverse Polarity

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<thead>
<tr>
<th>Diameter</th>
<th>Amps</th>
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<tr>
<td>1/4&quot; (6.0mm)</td>
<td>80-130</td>
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<tr>
<td>3/8&quot; (9mm)</td>
<td>140-190</td>
</tr>
<tr>
<td>1/2&quot; (12mm)</td>
<td>180-220</td>
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Welding Procedure
Remove old hardfacing and any fatigued base metal. Postalloy® 250 gouging electrode is useful for this purpose. Preheat from 200-400°F (93-204°C) is recommended for steels with a carbon content of .25 to .45. Steels with a higher carbon level should be preheated from 400-700°F (204-371°C). Do not preheat austenitic manganese steels. Use a minimum arc length equal to about the diameter of the electrode. Hold the electrode at 90° to the work surface for a proper application. Do not apply more than two layers. On manganese or hardened steel, an intermediate or cushion layer of Postalloy® 207 is recommended.

Packaging Options

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Standard Packaging</th>
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<tbody>
<tr>
<td>1/4&quot; (6.0mm)</td>
<td>Resealable Plastic Box</td>
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