Multi-Carbide Hardfacing Electrode

AbraTec® 6710 XHD

WELDING

• Exceptional wear resistance to grinding abrasion and particulate erosion

• Achieves final hardness in a single pass

• Deposit hardness attained with a refined mix of primary and secondary carbides

• Welds with a deposition rate double that of conventional electrodes with minimum slag
DESCRIPTION:

AbraTec 6710XHD is an easily handled multi-carbide electrode formulated to deposit smooth weld beads at an especially high rate. The mix of primary and secondary carbides render deposits that are resistant to high pressure abrasion and particle erosion at temperatures up to 1,000 °F (538°C). 6710XHD provides a single pass hardness of HRC 64. Can be used on carbon steels, low alloy steels, manganese steel castings and AR plate.

TYPICAL APPLICATIONS:

APPLIANCES        INDUSTRY
Dragline Bucket Parts  Mining
Conveyor Chains        Cement Works
Mixer Paddles          Concrete
Sludge Pumps           Oil & Gas Extraction
Manganese Steel Castings Railroad / Mining
AR Plate Weld Reinforcement Various Industries

TECHNICAL DATA:

Hardness as-deposited: HRC 63-65
Carbide Hardness: VPN 1200 - 1300 (M7C3)*
Maximum Service Temperature: 1000°F
Welding Parameters
Current & Polarity: AC or DCEN (-)

<table>
<thead>
<tr>
<th>Diameter</th>
<th>1/8&quot; (3.2mm)</th>
<th>5/32&quot; (4.0mm)</th>
<th>3/16&quot; (4.8mm)</th>
<th>1/4&quot; (6.0mm)</th>
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<tbody>
<tr>
<td>Amperage</td>
<td>120-190</td>
<td>170-230</td>
<td>220-290</td>
<td>300-450</td>
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**"M" stands for Cr-W-Cb-Mo indicating a complex of mixed, wear-reducing carbides.

TYPICAL WELDING PROCEDURE

Preparation: Clean the weld area and remove scale and oxide. For parts below 40°F or over 1” thick, preheat to 150°F. Higher carbon steels require higher preheats (300°F - 500°F). Do not preheat Hadfield manganese steel castings above 400°F.

Technique: Maintain a medium to short arc. The electrode should be inclined at a 45° angle in the direction of travel. Weld using stringers or weaving. Be advised that weaving more than 2x the electrode diameter is not advised as it may overheat the base metal and degrade weld deposit wear properties. Prior to extinguishing the arc, back whip the craters to reduce crater cracking.

Post-Welding: Slow cool parts in still air. High carbon steels and air hardenable steels should be covered with a heat retardant blanket.