

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:

### APPLICATIONS

Dragline Bucket Parts  
Conveyor Chains  
Mixer Paddles  
Sludge Pumps  
Manganese Steel Castings  
AR Plate Weld Reinforcement

### INDUSTRY

Mining  
Cement Works  
Concrete  
Oil & Gas Extraction  
Railroad / Mining  
Various Industries

## 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.

## TECHNICAL DATA:

Hardness as-deposited: HRC 63-65

Carbide Hardness: VPN 1200 - 1300 ( $M_7C_3$ )\*

Maximum Service Temperature: 1000°F

Welding Parameters

Current & Polarity: AC or DCEN (-)

Diameter	1/8" (3.2mm)	5/32" (4.0mm)	3/16" (4.8mm)	1/4" (6.0mm)
Amperage	120-190	170-230	220-290	300-450

\*"M" stands for Cr-W-Cb-Mo indicating a complex of mixed, wear-reducing carbides.

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