

# **AMTEC 63 CHROMIUM CARBIDE HARDSURFACING**

### DC REVERSE OR AC ELECTRODE

### **General Characteristics**

Amtec 63 is a high speed chromium carbide hardsurfacing alloy with 31% chrome content, and an alloyed core wire that has unmatched abrasive wear resistance on both heavy and light parts. The special metallic coating provides excellent welding performance, which permits obtaining a smooth surface. Despite high hardness, the deposit retains its toughness and wide weaving to 3 times the electrode size may be used without cracking. The deposit is machinable only by grinding. This electrode has tremendous edge control, and may be used on edges as thin a  $\frac{1}{2}$  inch without burn off. The high chromium content makesthe weld deposits maintain their resistance to wear even at elevated temperatures.

### **Procedure**

Clean the weld zone of all contaminants and remove previous hardsurfacing deposits by using Amtec 8 gouging rod. Another method would be tooverlay previous hardsurfacing with Amtec 207, to give a good base to put additional hardsurfacing onto. A 2 layer deposit is recommended where possible to give the best possible wear resistance. Do not exceed the 2 layer deposit due to the chance of weld deposit cracking. This electrode deposits by spray type arc transfer. Maintain a long arc when welding for best results.

## **Application**

For final overlays on parts subject to severe abrasion with some impact such as equipment for processing soil, rock, coal, cement, and ceramic matter. Use on dredger teeth, conveyer screws, asphalt augers, agitators, earth augers, and scrapers. Also used for surfaces that must resist abrasion combined with scaling such as open-hearth tools, grates, conveying chains in annealing furnaces, and manipulators. If extreme abrasion without impact is the problem, then the recommended electrode would be Amtec 65, which gives a higher hardness, and takes little impact.

Hardness (RC)				58-63		
Wear Coefficient					2.0%	
Diameter (Inch)	3/32	1/8	5/32	3/16		
(mm)	2.5	3.25	4.0	5.0		
Amps (approx.)	65-95	110-140	130-170	160- 220		

CONFIDENTIAL INFORMATION
Subject to change without notice

Tip Color – Purple Amtec 63 Imprint