



**AMTEC WA 67 HOT WORK TOOL STEEL
DC REVERSE OR AC ELECTRODE**

General Characteristics

Amtec WA 67 is an all position, extremely high alloyed, titania coated electrode suitable for welding both hot and cold work tooling applications. The deposit of the electrode reaches full hardness in the as welded condition. This electrode offers strength at elevated temperatures, and also has high temperature toughness and wear resistance, even at elevated temperatures. Suitable for welding the base metals of AISI types H-10, H-11, H-12, and H-13.

Procedure

Clean the welding zone free from oil, rust and other contaminants. Grind out cracks and other defects, or use Amtec 8 gouging electrode to remove unwanted metal. Pre-heat die blocks and other units to be welded to 800°F. On other alloys pre-heat and post-heat according to the base metal. Maintain the pre-heat temperature during welding, and deposit short stringer beads, peening after each deposit. After welding cool in still air to 300°F to obtain the ultimate grain refinement and uniform hardness in the weld deposit. Post-heat to 1000°F and hold temperature for one hour per inch of thickness. Cool in still air to room temperature.

Application

This electrode is primarily used for the welding of hot or cold work trimmers, shears, blanking and forming dies where chipping, spalling and cracking are a problem. Typical hot work examples are forging dies, coining dies, header dies, punches, extrusion mandrels and tong bits. Among the cold work applications are automotive trim sections up to 1/4" thick, forming dies, blanking dies, sledge hammer faces, cutting edges for hatchets and punches and composite fabrication of die sections.

Hardness (RC)	(as deposited) 56-60		
Alloy Type	Carbon-Silicon-Manganese-Chromium-Molybdenum-Vanadium Type		
Heat Treatment	Use H-12 or H-13 Procedure		
Diameter (Inch)	3/32	1/8	5/32
(mm)	2.5	3.2	4.0
Amps (approx.)	60-90	75-125	100-150

* Also available in tig wire 1/16 and 3/32 by 36" lengths/.035 and .045 mig wire on 25 lb. spools

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Subject to change without notice

Tip Color – Plain
Orange Coating