



## **AMTEC WK 69**

### **HOT WORK TOOL STEEL**

**DC REVERSE OR AC ELECTRODE**

#### **General Characteristics**

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Amtec WK 69 is an all position, extremely high alloyed, titania coated electrode especially suited for hot work applications. Special alloying and fluxing agents produce the ultimate in homogeneous, porous free, high density weld deposits that are machinable. Suitable for welding the base metals of AISI types H-10, H-11, H-12, and H-13.

#### **Procedure**

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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. For touch-up repairs on forging dies a localized preheat of 400 to 500°F is sufficient with a slow cool. For full impression welds on die blocks, preheat to 900°F and maintain temperature during welding. After welding, cool in still air to 300°F to obtain ultimate grain refinement and complete transformation on austenite in the weld deposit. Temper at 1050°F at one hour per inch of thickness. Cool in still air to room temperature.

#### **Application**

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This electrode is primarily used for overlays and complete impression welds on press forging dies. Other uses that are suited for this material include upsetter insert dies, hammer dies, wearing surfaces and all AISI H-10, H-11, H-12, and H-13 hot work tool steels where machinable welds are necessary.

<b>Hardness (RC)</b>	<b>(as deposited) 48-50</b>	
<b>Alloy Type</b>	<b>Carbon-Silicon-Manganese-Chromium-Vanadium-Tungsten Type</b>	
<b>Heat Treatment</b>	<b>Use H-12 or H-13 Procedure</b>	
<b>Diameter (Inch)</b>	<b>3/32</b>	<b>1/8</b>
<b>(mm)</b>	<b>2.5</b>	<b>3.2</b>
<b>Amps (approx.)</b>	<b>60-90</b>	<b>75-125</b>

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

**CONFIDENTIAL INFORMATION**  
**Subject to change without notice**

**Tip Color – Plain**  
**Red Coating**