



## **HI-ALLOY HSS - 10**

### **HIGH SPEED TOOL STEEL ALLOY**

**DESCRIPTION:** Hi-Alloy HSS-10 was designed specifically to maintain a tough, wear resistant, sharp edge at temperatures up to 1100° F. Additions of tungsten, molybdenum, and vanadium create the ultimate weld deposit for high speed tool and die repair.

**TYPICAL APPLICATIONS:** Build up and hardfacing of molding plates, mill cutters, cutting tools, lathe tools, punches, turning and planing tools, drawing mandrels and dies, trimming plates, reamers, and hot shears.

**PROCEDURES:** Prepare the weld area by grinding out cracks and other defects, remove oxides and other contaminants. When welding tool steel, preheat to 800° - 1100° F and maintain temperature during the entire procedure. No preheat is required when welding low carbon steels but a minimum of 3 layers is necessary to overcome dilution. Do not quench the part after welding, remove slag and reheat to 1000° F, allow to cool slowly in still air.

<b>AVAILABLE SIZES:</b>	1/8	5/32
<b>AMPERAGE RANGES:</b>	80 - 120	110 - 160
<b>POLARITY:</b>	DC Straight, DC Reverse, or AC	
<b>HARDNESS:</b>	As Welded 58 - 62 RC After Heat Treating 63 - 65 RC Approximately 56 RC at 1100° F	