



**!!!! WARNING !!!!**



**WELDING FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH.**

**BEFORE USING THIS PRODUCT THE WELDER (END-USER) MUST READ AND UNDERSTAND THE COMPLETE PRODUCT WARNING LABEL AND MATERIAL SAFETY DATA SHEET (MSDS).**

**THE MATERIAL SAFETY DATA SHEET (MSDS) WHICH OUTLINES THE POTENTIAL HEALTH HAZARDS AND SAFETY INFORMATION RELATED TO THIS PRODUCT CAN BE DOWNLOADED FROM THE MSDS PORTION OF THIS WEBSITE. IT IS ALSO AVAILABLE FROM YOUR EMPLOYER AND WELDING SUPPLY DISTRIBUTOR.**

**DO NOT PROCEED WITH USE OF THIS PRODUCT UNTIL YOU READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET (MSDS) AND PRODUCT WARNING STATEMENT.**

**BE SURE TO CONSULT THE LATEST VERSION OF THE MSDS.**

**SEE THE PRODUCT WARNING LABEL AND MSDS FOR COMPLETE WARNING INFORMATION.**



# **CROWN ALLOYS**

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## **COMPANY**

30105 STEPHENSON HWY.  
MADISON HEIGHTS, MI. 48071  
(248) 588-3790 • (800) 521-7878

## **Crown HSS-20**

Premium Coated Electrode (High Speed)

### **Typical Applications:**

For use on high speed tool steels M-1 through M-44. Hot and cold trimming dies, blanking dies, piercing dies, shearing blades, cutting and shaving knives. Excellent for cladding high wear areas on tools and equipment and also for building composite dies and tools. Retains its hardness even at elevated temperatures of 1,000°F or more.

### **Specifications:** (Typical Molybdenum High Speed Steel)

- Hardness 60-63 (Rockwell C) as welded
- Preheat High speed steel - 1,000°F. When used on other steels, use a preheat recommended for the base metal.
- Forging Temps. Initial - 1900°F to 2025°F  
Finish - 1600°F to 1700°F
- Annealing 1450°F to 1550°F
- Hardening 2150°F to 2250°F
- Drawing 950°F to 1100°F

### **Procedure:**

Prepare area to be welded by grinding out cracks and other defects. Remove all oxides and other contaminants. Preheat to recommended temperature and maintain during welding. Use AC or DC reverse polarity. Deposit short stringer beads. Peen thoroughly. Cool in still air.

### **Sizes:**

3/32 50-80 AMPS  
1/8 75-110 AMPS  
5/32 110-140 AMPS

**Identification:** Blue End