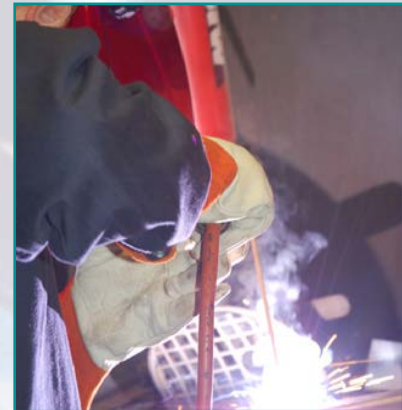


## Tul-Heet™

### Hot-Work Tool-Steel Electrode

Tul-Heet weld deposits are dense, porosity free and highly crack and wear-resistant.

- Versatile — the multi-purpose tool steel electrode
- Durable — deposits are “hard-as-welded” and retain maximum hardness up to 1000°F/538°C
- Designed for all-position control
- Excellent for frictional wear areas



### SPECIFICATIONS

Hardness .....	52-56 Rc
Machinability .....	Grind only
Annealing temperature .....	1500-1600°F/845-870°C
Cool rate .....	40°F/hr (22°C/hr)
Current .....	DCEP (DC+)



### PROCEDURE

Prepare the metal by grinding out cracks and other defects. Remove surface contaminants and oxides. Preheat die blocks and other units where the entire working surfaces are to be welded to 800°F/427°C. (On other alloys, preheat and postheat according to the base metal type.) Maintain the temperature during the welding operation. Use a stringer bead technique. After welding, cool in still air to 300°F/149°C to obtain ultimate grain refinement and uniform hardness in the weld deposit. Postheat at 1000°F/538°C. Hold the temperature at one hour per inch of thickness. Cool in still air to room temperature.



### APPLICATIONS

- Chromium hot work dies
- Blanking dies
- Coining dies
- Cutting edges for punches
- Tungsten-moly-cobalt tools and dies
- Repairing damaged or worn dies
- Trim dies
- Forging dies
- Punches
- Forming dies
- Header dies
- Extrusion dies

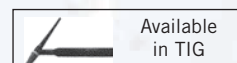


### ADDITIONAL CONSIDERATIONS

When determining suitability of this alloy for a given application, it is important to determine the following:

- 1) Type of tool steel being welded
- 2) Current condition of tool steel - annealed (soft) or hardened
- 3) Required final hardness
- 4) Welding to join or surface buildup
- 5) Welding finishing requirements

Code #	Diameter	Amperage
112-3-0000	5/32"	90-140
112-4-0000	1/8"	75-125
112-5-0000	3/32"	60-90



Available in select sizes only