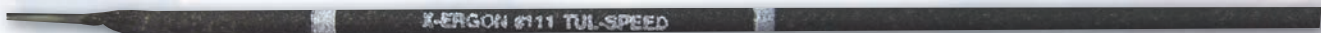
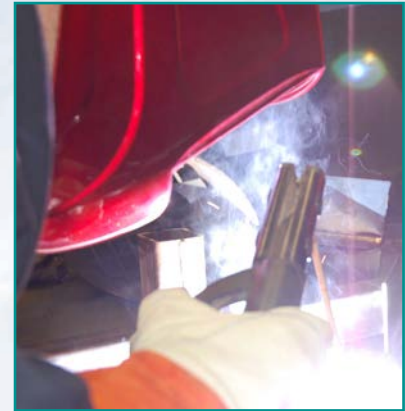


Tul-Speed™ High-Speed Tool-Steel Electrode

Tul-Speed electrodes produce high-speed tool steel welds for use on cutting edges, overlays, or repairing HSS tool steel.

- Durable — deposits are “hard-as-welded” and retain hardness up to 1000°F/538°C
- Exhibits exceptional toughness — excellent for cladding high-wear areas on equipment and for building composite dies and tools
- Produces excellent cutting qualities
- Can be heat-treated



SPECIFICATIONS

Hardness	60-64 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 all oxides and surface contaminants. Preheat high-speed steel to 1000°F/538°C. On base metals other than high-speed tool steel, preheat and postheat accordingly. Maintain the temperature during the welding operation. Use DCEP (DC+). Deposit short stringer beads. Peen each deposit rapidly when forgeable. After welding, cool the unit to 400°F/204°C in still air. Temper at 1000°F at one hour per inch of thickness upon reaching the tempering temperature.



APPLICATIONS

- Trimmer dies
- Wire guides
- Forming dies
- Slitter knives
- Blanking 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



Available in select sizes only

Code #	Diameter	Amperage
111-4-0000	1/8"	75-125
111-5-0000	3/32"	60-90

