



Manufacturers of Custom Welding Lines for Resale  
[www.selectrode.com](http://www.selectrode.com)

# SELECTRODE 6111 H-13 Tool Steel Tig

## INTERNATIONAL CLASSIFICATIONS

None

## FEATURES & APPLICATIONS

### APPLICATIONS:

6111 is a chromium-molybdenum-vanadium alloyed steel that produces hot working weld deposits that are tungsten free, homogeneous, porous free, dense, and may be annealed and re-hardened, if necessary.

- . Good resistance to abrasion at both low and high temperatures.
- . High level of toughness and ductility.
- . Good high temperature strength and resistance to thermal fatigue.
- . Uniform and high level of machinability and polish ability.

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

C	Mn	Si	P	S	Cr	Mo	Cu	Fe	V
0.39	0.4	1.0	<.02	<.02	5.2	1.4	<0.25	Bal.	1.0

## TYPICAL MECHANICAL PROPERTIES

<b>Undiluted Weld Metal</b>	<b>Maximum Value Up to:</b>
Hardness as welded	54-57 RC
Heat Treatment	Use H-13 procedure

## WELDING CURRENT & INSTRUCTIONS

**Recommended Gas:** DC- (100% Argon gas should be used to minimize burn-off of the tungsten electrode). Preheat 620-710°F (325-375°C)

**Welding Techniques:** Insure welding surface is free of contamination.

**Recommended Amperage Settings:**

Diameter Inches (mm)	Volts	Amps	Gas Flow
1/16 (1.6)	7-14	90-150	20
3/32 (2.5)	9-15	90-160	20
1/8 (3.2)	12-15	125-200	25