



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

# SELECTRODE 6012 ER120S-1 Steel TIG

## INTERNATIONAL CLASSIFICATIONS

**AWS A5.28 / ASME SFA5.28 Class ER120S-1**  
**EN ISO 16834-A: W 89 5 M Mn4Ni2, 5CrMo**

## FEATURES & APPLICATIONS

### APPLICATIONS:

6012 deposits high strength, very tough weld metal for critical applications. It was originally developed for welding HY 100, T1, pressure vessels and other steels in the 100,000 psi YS class.

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

C	Mn	P	Si	S	Cr	Ni	Mo	Fe
.07	1.7	.006	.50	.008	.40	2.4	.50	Bal.

## TYPICAL MECHANICAL PROPERTIES

<b>Undiluted Weld Metal</b>	<b>Maximum Value Up to:</b>
Tensile Strength	125,000 psi (862 MPa)
Yield Strength	110,000 psi (758 MPa)
Elongation	15%
Impact energy @ -60°F	70ft lb (95J)

## WELDING CURRENT & INSTRUCTIONS

**Recommended Current:** DC- (DCEN) Argon Gas

### Recommended Amperage Settings:

TDS 6012 – Revision 03/28/17

Diameter Inches (mm)	Metal Thickness Inches (mm)	Tungsten Size Inches (mm)	Amps	Travel Speed In/Min mm/s	
1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	35-60	12	5.1
3/32 (2.5)	3/32 (2.5)	1/16 (1.6)	45-85	12	5.1
3/32 (2.5)	1/8 (3.2)	1/16 (1.6)	55-100	12	5.1
1/8 (3.2)	3/16 (5.0)	3/32 (2.5)	65-130	10	4.2