



Manufacturers of Custom Welding Lines for Resale
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SELECTRODE 6003

308L Stainless Steel TIG

INTERNATIONAL CLASSIFICATIONS

AWS A5.9 ER308L

DIN 8556 SG X 2 CrNi 199

FEATURES & APPLICATIONS

CHARACTERISTICS:

The deposit has good resistance to general corrosion, and due to its low carbon content, good resistance to intergranular corrosion. It also has good resistance to oxidizing agents.

APPLICATIONS:

Is suitable for welding austenitic stainless of the 18/8 types. AISI types 304, 308, 321 and 347. It is an excellent intermediate layer for deposition of hard surfacing material.

MICROSTRUCTURE:

Austenitic Matrix with 3-9% Ferrite Typical Ferrite number is 6

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

C	Mn	P	Si	S	Cr	Ni	Fe
.02	1.7	.012	.30	.01	20	10	Bal.

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal

Tensile Strength

Yield Strength

Elongation

Maximum Value Up to:

87,000 PSI (587 MPa)

57,000 PSI (400 MPa)

34%

Impact Energy

58J: -320°F

Hardness

Brinell 160, Rockwell B 85

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC- (Argon or Helium gas should be used to minimize burn-off of the tungsten electrode)

Recommended Amperage Settings:

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