



Manufacturers of Custom Welding Lines for Resale
www.selectrode.com

SELECTRODE
6347
347L Flux Coated Tig

INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.9 ER 347L

EN 12072: W 19 9 Nb

FEATURES & APPLICATIONS

6347 TIG rod is designed for joining stabilized stainless steels. It is especially well suited for welding stainless steel pipe wherever a backing ring or a purge gas is required in order to provide impurity free weldments. This is necessary during stainless steel pipe welding in the chemical and petro-chemical industries.

A special 347 TIG alloy coated with our unique Vari-Flow fluxing system

- A very special TIG wire that eliminates the expense and wasted time associated with purging pipes with inert backing gasses
- Easy to handle 18 inch (450mm) length works in multiple positions without having to bend the wire.
- Can be ordered in grade 308L as item number 6308.
- Any other grade of stainless can be manufactured in 100 pound (45kg) per diameter minimum quantities.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: Austenite with 3-9% ferrite. Typical ferrite number is 6.

Flux Color: Yellow

| C | Mn | Si | S | P | Nb | Cr | Ni | Mo | Cu | Fe |
|-----|-----|-----|-----|-----|----|-------|-----|----|----|------|
| .03 | 1.5 | .45 | .01 | .02 | .5 | 19.13 | 9.9 | .2 | .1 | Bal. |

TYPICAL MECHANICAL PROPERTIES

| | |
|-----------------------------|-----------------------------|
| Undiluted Weld Metal | Maximum Value Up to: |
| Tensile Strength | 96,000 PSI (660 MPa) |
| Yield Strength | 70,000 PSI (490 MPa) |
| Elongation | 42% |
| Impact Energy | 40J: -157°F (-105°C) |
| Hardness | Brinell 209, Rockwell B96 |

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC Straight (-)

Recommended Amperage Settings:

| Diameter (mm) | 3/32 (2.5) | 1/8 (3.25) |
|------------------|------------|------------|
| Minimum Amperage | 60 | 80 |
| Maximum Amperage | 100 | 120 |

Welding Techniques: Clean weld surface carefully to remove all scale and corrosion. Sections over 3mm should be beveled to permit complete penetration. Clean joint surface using a stainless steel brush. Use DC - (straight polarity), 2% thoriated tungsten electrode.

Welding Positions: Flat, Horizontal, Vertical up

Deposition Rates:

| Diameter (mm) | Length (mm) | Weldmetal/ Rods | Rods per lb (kg) of Weldmetal | Arc Time of Deposition min/lb (kg) | Amperage Setting | Recovery Rate |
|---------------|-------------|-----------------|-------------------------------|------------------------------------|------------------|---------------|
|---------------|-------------|-----------------|-------------------------------|------------------------------------|------------------|---------------|

| | | | | | | |
|------------|-----------|-------------|---------|---------|-----|------|
| 3/32 (2.5) | 18" (450) | 1.5oz (44g) | 10 (22) | 21 (46) | 80 | 100% |
| 1/8 (3.25) | 18" (450) | 2.0oz (58g) | 8 (18) | 18 (40) | 100 | 100% |

APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

| Diameter (mm) | 3/32 (2.5) | 1/8 (3.25) |
|-----------------|------------|------------|
| Length (mm) | 18" (450) | 18" (450) |
| Electrodes / lb | 14 | 10 |
| Electrodes / kg | 31 | 22 |