

## Applications

TIG Welding of 18%Cr-8%Ni-Nb(SUS 347) and 18%Cr-8%Ni-Ti(SUS321) stainless steel

## Characteristics on Usage

As the weld metal contains ferrite, its resistance to crack is good.

Bead appearance and weldability are good.

ST-347 has stabilizing element (Nb) thus providing good intergranular corrosion resistance and better heat resistance.

Due to high creep strength at high temperature, suitable for the welding of boiler and gas turbine.

### Typical Chemical Composition of Wire (%)

C	Si	Mn	Cr	Ni	Nb
0.05	0.43	1.66	20.0	9.6	0.7

### Typical Mechanical Properties of All-Weld Metal

TS MPa(lbs/in <sup>2</sup> )	EL (%)
680 (98,600)	32

### Typical Welding Conditions (DC-)

Size mm(in)	Currents A	Gas Flow (ℓ /min.)	Shielding gas
1.2 (.045) ~ 2.0 (5/64)	50 ~ 100	25	Ar
1.6 (1/16) ~ 3.2 (1/8)	100 ~ 200		
2.4 (3/32) ~ 3.2 (1/8)	200 ~ 300		
3.2 (1/8)	300 ~ 400		