

## Applications

Mig Welding of 18%Cr-8%Ni-Nb(STS 347) and 18%Cr-8%Ni-Ti(STS 321) stainless steel

## Characteristics on Usage

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

SM-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)	30

### Typical Welding Conditions (DC+)

Size mm(in)	A	V	Speed (cm/min.)	Gas Flow (ℓ /min.)	Remarks
1.2 (.045)	250	26	30	25	Shielding gas
1.6 (1/16)	300	29	35	25	100%Ar or Ar+2%O <sub>2</sub>