

Applications

Mig Welding of 29%Cr-9%Ni stainless steel and dissimilar metals

Characteristics on Usage

Due to high Cr content, it has excellent resistance to corrosion.

This wire contains a high ferrite level in its austenitic structure thus providing better crack resistance.

SM-312 is suitable for the welding of dissimilar metal such as stainless steels, mild steels and low alloy and used build up of hardfacing.

Typical Chemical Composition of Wire (%)

C	Si	Mn	Cr	Ni
0.10	0.38	1.68	30.0	8.8

Typical Mechanical Properties of All-Weld Metal

TS MPa(lbs/in ²)	EL (%)
720 (104,400)	32

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 ₂