

Applications

MIG welding of low carbon 18%Cr-12%Ni-2% Mo steel for chemical industries and nuclear reactors.

Characteristics on Usage

SM-316LSi is an austenitic type stainless steel wire, the weld metal contains ferrite and crack sensitivity is extremely good. The Usability, such as arc stability and assimilability of welds to base metal is extremely excellent. The high silicon content of wire improves the welding properties, such as arc stability and bead wetting. Resistance to corrosion and mechanical properties of weld metal are great.

Typical Chemical Composition of Wire (%)

C	Si	Mn	Cr	Ni	Mo
0.030	0.65	2.36	19.76	11.62	2.50

Typical Mechanical Properties of All-Weld Metal

TS MPa(lbs/in ²)	EL (%)
597 (86,600)	37

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 100%Ar or Ar+2%O ₂
1.6 (1/16)	300	29	35		