SM-309

AWS A5.9 / ASME SFA5.9 ER309
JIS Z3321 YS309
EN ISO 14343-A G 23 12

Applications

MIG welding of 22%Cr-12%Ni steel, heat resistant cast steel clad side of 18%Cr-8%Ni clad steel and stainless steel to Cr-Mo steel or carbon steel.

Characteristics on Usage

As the weld metal contains ferrite, its crack resistibility is good.
Due to its high level of alloy, it has excellent resistance to heat.

Typical Chemical Composition of Wire (%)

C	Si	Mn	Cr	Ni
0.09	0.39	1.60	23.5	12.8

Typical Mechanical Properties of All-Weld Metal

TS MPa(lbs/in^2)	EL (%)
660 (95,700)	36

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)	290	28	34	25	100%Ar or Ar+2%O_2

Approval

ABS