

Applications

TIG welding of extra-low carbon 18%Cr-18%Ni and 18%Cr-8%Ni stainless steel.

Characteristics on Usage

ST-308L is a filler rod for TIG welding with pure Ar gas.

As the weld metal contains ferrite, its crack resistibility is excellent.

Both its bead appearance and weldability are good.

The corrosion resistibility and intergranular corrosion, resistibility are extremely excellent.

Furthermore, resistance to corrosion and mechanical properties are good.

Typical Chemical Composition of Wire (%)

C	Si	Mn	Cr	Ni
0.02	0.36	1.70	20.0	10.3

Typical Mechanical Properties of All-Weld Metal

TS MPa(lbs/in ²)	EL (%)	CVN-Impact Value J(ft.lbs) 0°C (32°F)
600 (87,000)	41	110 (81)

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		

Approval

KR, ABS, DNV, LR, NK, BV, CCS