

## Applications

TIG welding of 25%Cr-20%Ni steel.

## Characteristics on Usage

ST-310 is a filler rod for TIG welding with pure Ar gas.

The structure of the weld metal is all austenite.

Resistance to corrosion and heat of weld metal is excellent.

Elongation of weld metal is extremely good.

### Typical Chemical Composition of Wire (%)

C	Si	Mn	Cr	Ni
0.09	0.35	1.90	26.8	20.9

### Typical Mechanical Properties of All-Weld Metal

TS MPa(lbs/in <sup>2</sup> )	EL (%)	CVN-Impact Value J(ft.lbs) 0°C (32°F)
610 (88,500)	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		