

Applications

Butt and fillet welding of carbon steel for pressure vessels, tubes, ships.

Characteristics on Usage

- ① Use welding grade Ar 100% gas.
- ② All position welding and steel sheet welding can be performed quite easily.
- ③ Most suitable for one- side welding of tubes.

Typical Chemical Composition of Wire (%)

C	Si	Mn	P	S	Cr	Ni	Mo	Ti	Cu	V	Zr	Al
0.05	0.52	1.15	0.016	0.005	0.026	0.017	0.003	0.07	0.17	0.003	0.04	0.08

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	CVN-Impact Value J(ft.lbs) -30°C (-22°F)
500 (72,500)	580 (84,200)	29.0	180 (132)

Typical Welding Conditions (DC-)

Size mm(in)	Tungsten Electrode size (mm)	Currents A	Gas Flow (ℓ /min.)	Shielding gas
1.0 (.039) ~ 2.0 (5/64)	1.4	50 ~ 100	25	Ar
1.6 (1/16) ~ 3.2 (1/8)	2.4	100 ~ 200		
2.4 (3/32) ~ 3.2 (1/8)	3.2	200 ~ 300		
3.2 (1/8)	4.0	300 ~ 400		