

Applications

Typical industrial applications include shipbuilding, machinery, piping, bridge, structural fabrication and building.

Characteristics on Usage

SC-91P is a rutile-type flux cored wire to be used with Ar+CO₂ gas mixture shielding. Provide an exceptionally smooth and stable arc with a fast freezing slag system, this wire is ideal for pipe welding. Bead shape and appearance are excellent in all position welding.

Notes on Usage

- ① Proper preheating 50~150°C(122~302°F) and inter-pass temperature must be used in order to release hydrogen which may cause cracking in weld metal when electrodes are used for medium and heavy plates.
- ② One-side welding defects such as hot cracking that may occur with wrong welding parameter such as high welding speed.
- ③ Use Ar+20~25%CO₂ gas.

Welding Position

Current

Shielding Gas



1G 2F 3G 4G
(PA) (PB) (PF) (PE)

DC +

Ar+20~25%CO₂

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni	Mo
0.05	0.45	1.30	0.013	0.010	0.85	0.22

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)
640 (92,900)	680 (98,700)	26.0	0 (32)	80 (59)

Approval

I Packing

Dia. (mm)	1.2	Spool(kg)	12.5	15	20
(in)	.045	(lbs)	28	33	44

Sizes Available and Recommended Currents (Amp.)

F & HF	120~300
V-up, OH	120~260
V-down	180~280