

# SC-91LP

TYPE : Rutile

AWS A5.29 / ASME SFA5.29 E91T1-GM  
EN ISO 17632-A-T50 4 1Ni P M 1 H5

## Applications

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

## Characteristics on Usage

- ① SC-91LP is a rutile-type flux cored wire to be used with Ar+CO<sub>2</sub> gas mixture shielding.
- ② Provide an exceptionally smooth and stable arc with a fast freezing slag system, this wire is ideal for pipe welding.
- ③ Bead shape and appearance are excellent in all position welding.
- ④ It provide excellent notch toughness at low temperature.

## Notes on Usage

- ① Proper preheating 50~150°C(122~302°F) and interpass 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 Use Ar+20~25%CO<sub>2</sub> gas.

## Welding Position



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

## Current

DC +

## Shielding Gas

Ar+20~25%CO<sub>2</sub>

## Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni
0.05	0.40	1.40	0.013	0.006	0.90

## Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	CVN-Impact Value J (ft · lbs)	
			-20°C (-4°F)	-40°C (-40°F)
650 (94,300)	690 (100,000)	24.5	80 (59)	60 (44)

## Approval

## I Packing(Including Ball Pac)

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

## Sizes Available and Recommended Currents (Amp.)

Size mm (in)	1.2 (.045)
F & HF	120~300
V-up, OH	120~260
V-down	180~280