## **Applications**

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

#### Characteristics on Usage

- (1) SC-91 is a rutile-type flux cored wire to be used with CO<sub>2</sub> gas shielding.
- (2) Provide an exceptionally smooth and stable arc with a fast freezing slag system.
- ③ Bead shape and appearance are excellent in all position welding.

#### **Notes on Usage**

- ① Proper preheating 50~150℃(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 100%CO2 gas.

Welding Position	Current	Shielding Gas
	DC +	100%CO <sub>2</sub>
1G 2F 3G 4G (PA) (PB) (PF) (PE)		

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

С	Si	Mn	Р	S	Ni
0.06	0.55	1.20	0.013	0.013	0.85

### Typical Mechanical Properties of All-Weld Metal

YS	TS	EL	CVN-Impact Value J (ft · lbs)
MPa(lbs/in²)	MPa(lbs/in²)	(%)	0°C (32°F) -20°C (-4°F)
645 (93,600)	660 (95,800)	24.0	100 (74) 70 (52)

Approval	l Packing(Including Ball Pac)							
	Dia. (mm) (in)				Spool(kg) (lbs)	12.5 28		

Sizes Available and Recommended Currents (Amp.)				
Size mm (in)	1.2 (.045)	1.4 (.052)	1.6 (1/16)	
F & HF	250~300	260~320	290~350	
V-up, OH	180~230	200~260	220~280	
V-down	250~310	260~320	280~340	