

TYPE: Rutile

Applications

SF-80W is designed for the welding of weather-proof steel for example corten A-242 or A-588. Mainly used for flat and horizontal fillet welding on structural exposed steel usually found on buildings and bridges.

Characteristics on Usage

SF-80W is a titania type flux cored wire which can be used for all welding in conjunction with CO₂ shielding gas.

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 One-side welding defects such as hot cracking may occur with wrong welding parameter such as high welding speed.
- ③ Use 100% CO2 gas.

Welding Position	Current	Shielding Gas
	DC +	CO ₂
1G 2F 3G 4G (PA) (PB) (PF) (PE)		

Typical Chemical Composition of All-Weld Metal (%)

С	Si	Mn	Р	S	Cr	Ni	Cu
0.04	0.40	0.92	0.016	0.012	0.50	0.50	0.40

Typical Mechanical Properties of All-Weld Metal

YS	TS	EL	Temp.	CVN-Impact Value
MPa(lbs/in²)	MPa(lbs/in²)	(%)	℃ (°F)	J (ft · Ibs)
530 (77,000)	610 (88,600)	26	-30 (-22)	40 (30)

Approval	l Packing							
	Dia. (mm)	1.2	1.4	1.6	Spool(kg)	12.5	15	20
	(in)	.045	.052	1/16	(lbs)	28	33	44

Sizes Available and Recommended Currents (Amp.)					
Size mm (in)	1.2 (.045)	1.4 (.052)	1.6 (1/16)		
F & HF	200~300	250~350	300~400		
V-up,OH	120~260	140~270	180~280		
V-down	200~300	250~350	300~400		