

SELF-SHIELD FLUX CORED WIRE

FCAW	AWS
SFC-71B SFC-71G	A5.20 E71T-11 A5.20 E71T-GS

GASLESS SELF-SHIELD FLUX CORED WIRE

Member of the self-shield flux cored wires.

Adding slag-forming agent, deoxidizer and denitrification agent with an appropriate melting point, which can be directly welded without shielding gas, and good welding characteristics can be obtained. The designs of cored flux utilize the principle of slagging and gas production of metallurgical reaction to demonstrate the joint protection of gas slag in the molten pool.

It delivers efficiency 3~5 times of regular manual welding.

Features

Here below are the features discovered.

1. No external protective gas source is needed, which reduces the weight of the welding torch, simplifies the structure and makes it easier to operate.
2. It is designed for joining carbon steel, galvanized sheet light structure.
3. Good arc penetration, spray arc transfer, low spatters.
4. Nice bead appearance, excellent slag removal.
5. Superior wind, blow hole resistance.
6. Superior mechanical properties at all-positional welding.
7. Use tiny welding machine, light weight, small size and convenient to carry.
8. Use 220V Power source.
9. Can weld galvanized sheet with good ductility at bending tests.

Product	SFC-71B	SFC-71G
AWS Spec.	A5.20 E71T-11	A5.20 E71T-GS
Dia. (mm)	0.8mm 、 0.9mm 、 1.0mm 、 1.2mm 、 1.6mm	
Packing	1KG、 5KG、 15KG	
Polarity	DC(-) connection, base metal connected to positive polarity and nozzle connected to negative polarity.	

SFC-71B、SFC-71G-weld bead

Chemical Composition	C	Mn	Si	P	S	Al
SFC-71B	0.098	0.69	0.44	0.01	0.003	1.65
SFC-71G	C	Mn	Si	P	S	others
	0.24	1.35	0.18	0.01	0.003	2.2

SFC-71B、SFC-71G-All-deposit metal

Tension Test :	Y.S.	T.S.	EL(%)
SFC-71B	420	570	25
SFC-71G	620	660	

SFC-71B、SFC-71G-Welding parameters

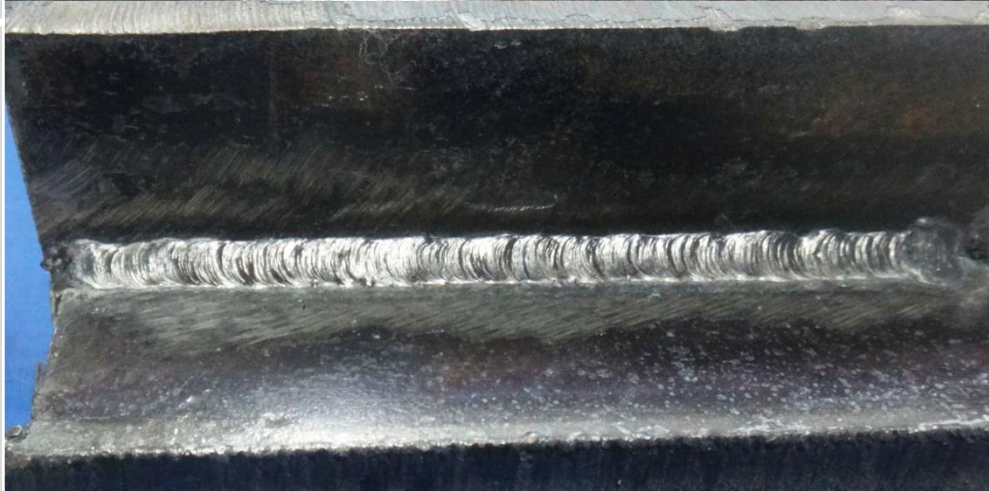
Dia. (mm) parameters	0.8	0.9	1.0	1.2	1.6
Voltage	18-24	18-28	20-30	20-30	20-30
Current	100-160	100-200	120-230	140-250	160-260
Stick-out	10-15	10-15	10-15	10-15	10-15
Gas flow rate	15-25	15-25	15-25	15-25	15-25

1、SFC-71B $\Phi 0.9\text{mm}$ Flat fillet welding

60A
15~16V



90A
16~17V



120A
16.5~17.5V



2、SFC-71B $\Phi 0.9\text{mm}$ at fillet Vertical position

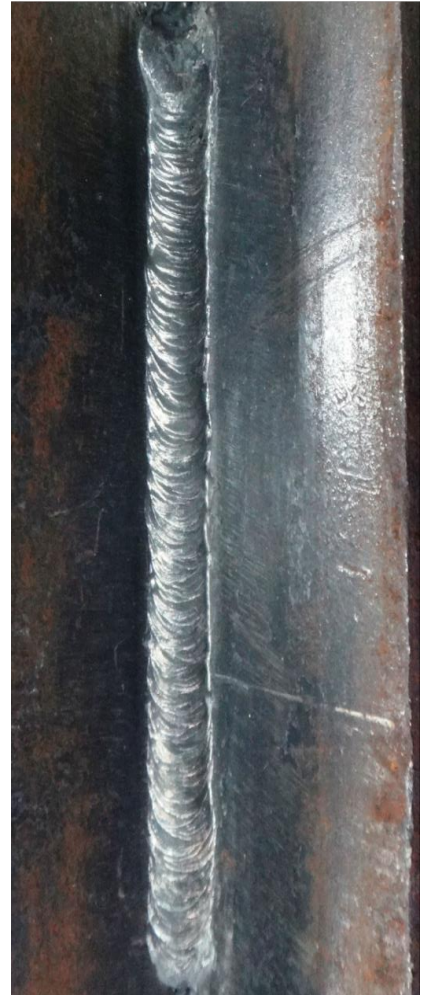
60A/15~16V



90A/16~17V



120A/16.5~17.5V



3、SFC-71B $\Phi 1.2\text{mm}$ Flat Fillet Welding

120A
15~16V



140A
16~17V

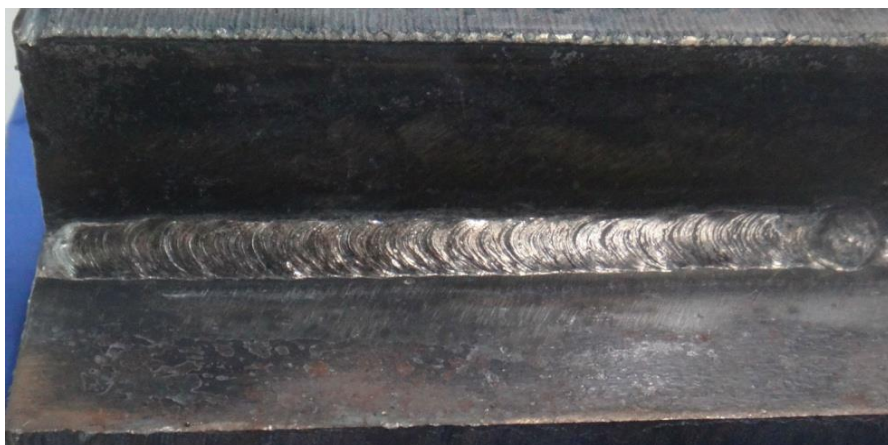


3、SFC-71B $\Phi 1.2\text{mm}$ flat fillet welding

160A
17~18V



170A
18~19V

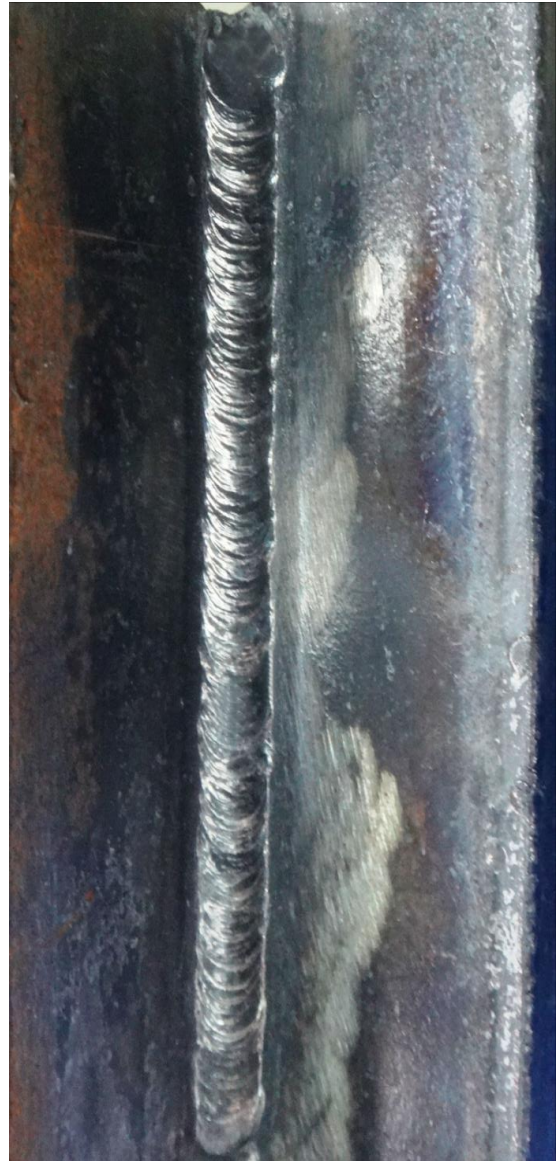


3、SFC-71B $\Phi 0.9\text{mm}$ vertical fillet position

120A/15~16V



140A/16~17V



3、SFC-71B $\Phi 0.9\text{mm}$ vertical fillet position

160A/17~18V



170A/18~19V



Deposition rate & efficiency

Product	Dia.	Amp.	Volt.	Rate	Efficiency
SFC-71B	0.9	30	14-15	N.A.	
		60	15-16	0.6	78
		90	16-17	1	80
		120	16.5-17.5	1.1	80
	1.2	120	15-16	0.6	67
		140	16-17	1	78
		160	17-18	1.2	81
		170	18-19	1.3	82

