CF-120

For highly efficient fillet welding

AWS A5.1 E6027 KS D 7004 E4327 JIS Z3211 E4327

Applications

Horizontal and flat fillet welding of ship structures, bridges, structural steels of buildings and general structures.

Characteristics

CF-120 is an iron powder iron oxide type electrode which is designed for exclusive use in horizontal and flat fillet welding.

It is also suitable for Gravity welding, Auto-contact welding and manual welding. Arc is soft. Its slag removal, undercut resistibility and bead appearance are excellent.

Highly efficient fillet welding of both small leg length and large leg length can be performed, because it is applicable for a wide range of speed ratio $(0.8 \sim 1.8)$.

Notes on usage

- (1) Adjust the welding current to keep the proper slag covering because optimum welding current is subject to the welding process and the surface condition of steel plates.
- (2) In the case of manual welding operate by contact welding.
- (3) In the case of Gravity welding the optimum speed ratio is 1.2 \sim 1.6.
- (4) Dry th electrodes at 70~100°C for 30~60 minutes before use, because excessive moisture absorption causes undercut and irregular beads.

Typical chemical composition of weld metal (%)

С	Mn	Si	Р	S	
0.07	0.65	0.34	0.018	0.012	

Typical mechanical properties of weld metal

YP	TS	EL	IV J (kgf-m)	
N/mm ² (kgf/mm ²)	N/mm ² (kgf/mm ²)	%	-30℃	
400(41)	470(48)	34	40(4)	

Size & recommended current range (AC or DC ±)

Dia. (mm)		3.2	4.0	4.5	5.0	5.5	6.0	6.4	7.0
	L (mm)	450	450,550	450,550 700	450,550 700	450,550 700	450,550 700	450,550 700	450,550 700
Amp.	Autocon								280-320
	Gravity Manual	130-150	160-180	190-210	200-230	230-270	260-290	280-310	300-340
Leg	length(mm)	3.5-5.0	5.0-5.5	5.5-6.0	6.0-6.5	6.5-7.0	7.0-8.0	7.5-8.5	8.0-9.5