S-800P × A-G[A-3]

TYPE : Neutral

AWS A5.23/ASME SFA5.23 F8A4-EG-G
JIS Z3183 S582-H
AWS A5.23/ASME SFA5.23 F8A4(P2)-EA3-G
JIS Z3183 S584-H
EN ISO 14174 S A AB 1 / EN ISO 14171 S4[S4Mo]

Applications

Butt and flat fillet welding of buildings, bridges and API Line-pipe. (longitudinal)

Characteristics on Usage

S-800P is a basic agglomerated, slightly Si-alloying flux for submerged arc welding, specially for single and multi-pass butt welding of mild, medium and high tensile steels.
It provides good bead appearance, better slag removal and high impact value of the weld metal together.
It is relatively insensitive to rust and dirt on a base metal, and makes better resistance to pockmark and pits. As the consumption of flux is low, it is very economical.

Notes on Usage

① Dry the flux at 300~350˚C (572~662˚F) for 60 minutes before use.
② When the flux height is excessive, poor bead appearance may occur.
③ Use welding current and speed as low as possible at the first layer of groove to avoid cracking.

Approval	I Current	I Basicity Index
	AC, DC +	1.9

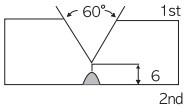
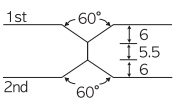
Typical Chemical Composition of All-Weld Metal (%)

Wire	C	Si	Mn	P	S	Mo
A-G	0.09	0.30	1.57	0.019	0.008	-
A-3	0.08	0.32	1.54	0.022	0.010	0.40

Typical Mechanical Properties of All-Weld Metal

Wire	YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	CVN-Impact Value J (ft · lbs) -20˚C (-4˚F)	-40˚C (-40˚F)
A-G	520 (75,500)	610 (88,500)	28.0	160 (118)	100 (74)
A-3	630 (91,500)	680 (98,700)	24.0	80 (59)	70 (52)

Typical Welding Conditions

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass		Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks
A-G	4.8	20		1st	1	600	30	40	Both Side Multi-pass
					2~4	600~650	30~32	30~35	
						Back Gouging			
				2nd	5	650	30	40	
					6	650	32	35	
A-3	L(DC+):4.0 T(AC):4.0	17.5		1st		(L)850 (T)650	34 40	120	Both Side Single-pass (tandem)
				2nd		(L)1000 (T)650	34 40	120	