

S-800P × M-12K[H-14]

TYPE : Neutral

AWS A5.17/ASME SFA 5.17 F7A2-EM12K
 JIS Z3183 S502-H
 AWS A5.17/ASME SFA 5.17 F7A(P)6-EH14
 JIS Z3183 S502-H
 EN ISO 14174 S A AB 1 / EN ISO 14171 S2Si[S4]

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 pit.

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

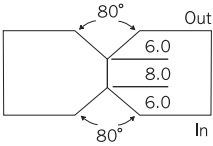
Typical Chemical Composition of All-Weld Metal (%)

Wire	C	Si	Mn	P	S
M-12K	0.08	0.47	1.06	0.024	0.012
H-14	0.10	0.29	1.56	0.022	0.011

Typical Mechanical Properties of All-Weld Metal

Wire	YS	TS	EL	CVN-Impact Value J (ft · lbs)	
	MPa(lbs/in ²)	MPa(lbs/in ²)	(%)	-30°C(-22°F)	-50°C(-58°F)
M-12K	460 (66,800)	540 (78,400)	32.0	80 (59)	-
H-14	490 (71,100)	570 (82,800)	30.0	120 (88)	80 (59)

Typical Welding Conditions

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks
M-12K	4.8	20		1st	800	34	40	Both Side Single-pass
(H-14)				2nd	900	36	35	