

S-800WT × M-12K

TYPE : Neutral

AWS A5.17/ASME SFA5.17 F7A8-EM12K
EN ISO 14174 S A FB 1 / EN ISO 14171 S2Si

SAW

Applications

Butt and flat welding of windmill tower, hydro plant penstocks and pressure vessels.

Characteristics on Usage

It provides good bead appearance, better slag removal and together high impact value of the weld metal. It is relatively insensitive to rust and dirt on a base metal and makes better resistance to pockmarks and pits. High impact values in two-run technique. 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
Ce-Mack, CWB	AC, DC +	2.7

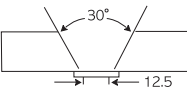
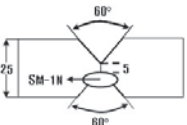
Typical Chemical Composition of All-Weld Metal (%)

Wire	C	Si	Mn	P	S	Ti	B	BM	Th.(mm)
M-12K	0.090	0.20	1.45	0.020	0.010	0.008	0.0020	SM490	25

Typical Mechanical Properties of All-Weld Metal

Wire	YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Position of fracture	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)	BM	Th. (mm)
M-12K	520 (75,400)	570 (82,700)	32.0	-	-60 (-76)	130 (95)	SM490	25
	-	550 (79,800)		BM	-60 (-76)	100 (74)	S355NL	25

Typical Welding Conditions

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks
M-12K	4.0	25		1~13	570	30	40	AWS A5.17
M-12K	4.8	25		1	320	28	70	SM-1N
				1st	(L)750	28	60	Both Side
				2nd	(T)650	34	60	Single-pass
					(L)900	32	65	(tandem)
					(T)650	38	65	