



SAW Fluxes AUTOMELT A81



GENERAL DESCRIPTION:

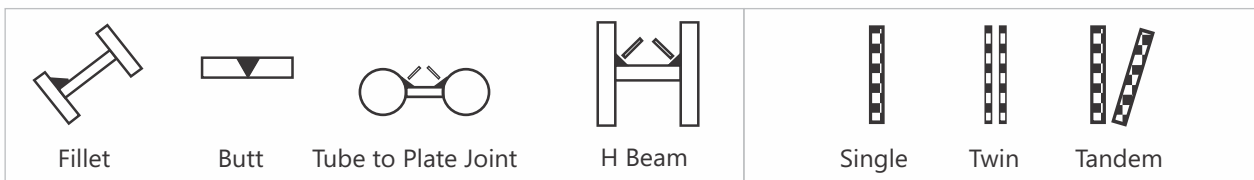
- Agglomerated Flux
- Aluminate- Rutile Type Flux
- Acidic Flux having Basicity Index of 0.6
- Active Flux with moderate Si and Mn pick-up
- For Single and Multi-pass Butt and fillet welding at high speeds
- For Low Alloy Steels
- Suitable for Single and Multi-Wire, twin and tandem wire system
- Suitable for Welding Speeds of 0.40-1.20 m/min
- Grain Size – 0.25-1.60 mm
- Type of Current – DCEP / AC 1000A
- Wall Neutrality Number with EM12K Wire is 56

CLASSIFICATION :

With Wire	AWS 5.17/5.23	Single / Multi-pass
AUTOMELT EM12K	F7AZ-EM12K	Limited Multi-pass
AUTOMELT EA2	F8AZ-EA2-A2	Limited Multi-pass
AUTOMELT EA4	F8AZ-EA4-A4	Limited Multi-pass
AUTOMELT EB2	F9PZ-EB2-B2	Limited Multi-pass
AUTOMELT EB3	F9PZ-EB3-B3	Limited Multi-pass

TYPICAL APPLICATIONS :

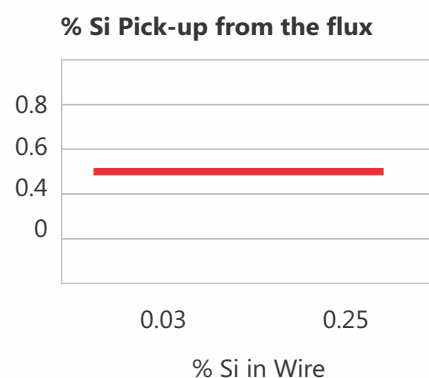
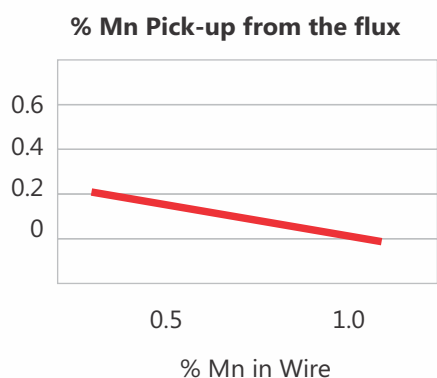
- High Speed Butt & Fillet Welding
- Tube to Plate Joint
- Fabrication of H & I Beams
- Fabrication of Boilers



APPROVALS:

IBR

ACTIVITY OF THE FLUX:





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CHEMICAL COMPOSITION OF FLUX:

$\text{SiO}_2 + \text{TiO}_2$	$\text{CaO} + \text{MgO}$	$\text{Al}_2\text{O}_3 + \text{MnO}$	CaF_2
25	10	50	10

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL (Wt%), TYPICAL:

With wire	C	Mn	Si	Cr	Mo
Automelt EM12K	0.07	1.20	0.70	--	--
Automelt EA2	0.06	1.20	0.70	--	0.50
Automelt EA4	0.06	1.50	0.70	--	0.50
Automelt EB2	0.06	1.15	0.70	1.10	0.50
Automelt EB3	0.06	1.15	0.70	2.10	1.00

MECHANICAL PROPERTIES OF ALL WELD METAL, TYPICAL:

With wire	Condition	UTS, MPa	YS, MPa	% E	CVN Impact (J) 0°C
Automelt EM12K	AW	540	430	26	40
Automelt EA2	AW	570	500	23	40
Automelt EA4	AW	600	520	23	40
Automelt EB2	PW	640	570	20	40
Automelt EB3	PW	700	600	19	40

AW – As Welded; PW – After Post weld heat treatment of 690°C for 1 hour

The chemistry and mechanical properties will depend on actual wire chemistry and arc voltage