



SAW Fluxes **AUTOMELT A61**



GENERAL DESCRIPTION:

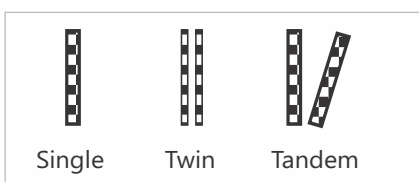
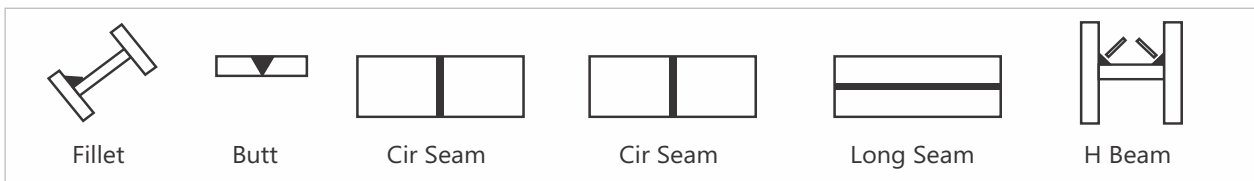
- Agglomerated Flux
- Manganese-Silicate Type Flux
- Neutral Flux having Basicity Index of 1.0
- Active Flux with high Si and Mn pick-up
- For Single and Multi-pass Butt and fillet welding at high speeds (With EM12K Wire restrict to 15 mm thickness for multi-pass)
- For Carbon Steels
- Suitable for Single and Multi-Wire, twin and tandem wire system
- Suitable for Welding Speeds of 0.40 – 2.00 m/min
- Grain Size – 0.25-1.60 mm
- Type of Current – DC / AC 1200A
- Wall Neutrality Number with EM12K Wire is 85

CLASSIFICATION :

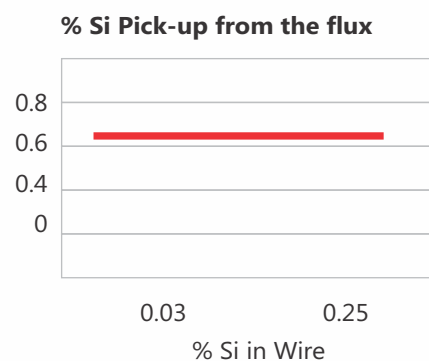
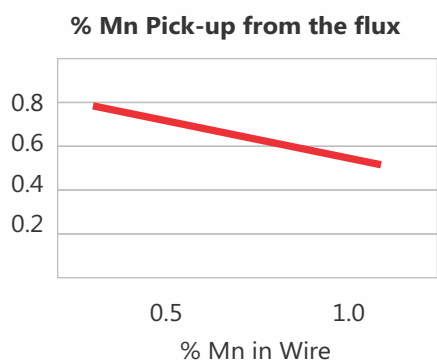
With Wire	AWS 5.17/5.23	Single / Multi-pass
AUTOMELT EL8	F7A0-EL8	Multi-pass
AUTOMELT EL12	F7A0-EL12	Multi-pass
AUTOMELT EM12K	F7A2/P2-EM12K	Limited Multi-pass

TYPICAL APPLICATIONS :

- High Speed Butt Welding
- Spiral, long Seam and Cir Seam Welding of Pipes
- Fabrication of H & I Beams (thickness above 6 mm)



ACTIVITY OF THE FLUX:





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CHEMICAL COMPOSITION OF FLUX:

SiO ₂ + TiO ₂	CaO + MgO	Al ₂ O ₃ + MnO	CaF ₂
35	15	40	5

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

With wire	C	Mn	Si
Automelt EL8	0.06	1.30	0.70
Automelt EL12	0.07	1.30	0.70
Automelt EM12K	0.06	1.50	0.90

MECHANICAL PROPERTIES OF ALL WELD METAL, TYPICAL:

With wire	Condition	UTS, MPa	YS, MPa	% E	CVN Impact (J)	
					-20°C	-30°C
Automelt EL8	AW	530	440	25	40	--
Automelt EL12	AW	540	450	26	40	--
Automelt EM12K	AW	510	430	28	50	40
Automelt EM12K	PW	540	450	28	50	40

AW – As Welded; PW - After Post weld heat treatment of 620°C for 1 hour

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