



SAW Fluxes **AUTOMELT A61S**



GENERAL DESCRIPTION:

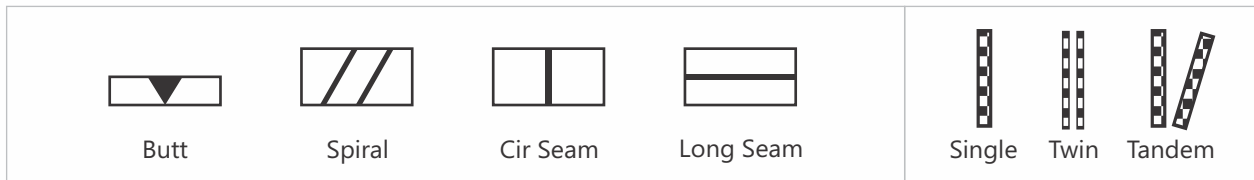
- Agglomerated Flux
- Calcium-Silicon Type Flux
- Neutral Flux having Basicity index of 1.0
- Active Flux with moderate Si and Mn pick-up
- For Single and Multi-pass Butt welding at high speeds (With EM12K Wire restrict to 15 mm thickness for multi-pass)
- For Carbon Steels
- Suitable for Single and 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 55

CLASSIFICATION :

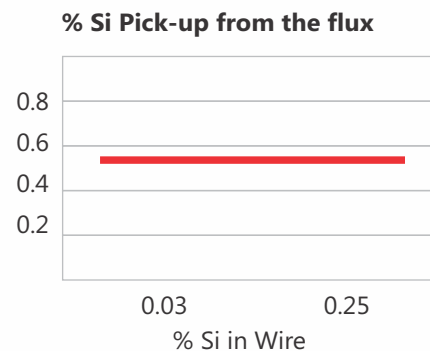
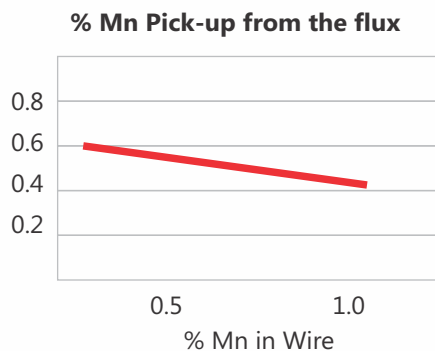
With Wire	AWS 5.17/5.23	Single/Multi-pass
AUTOMELT EL8	F7AZ-EL8	Multi-pass
AUTOMELT EL12	F7AZ-EL12	Multi-pass
AUTOMELT EM12K	F7A0/P0-EM12K	Limited Multi-pass

TYPICAL APPLICATIONS :

- High Speed Butt Welding
- Spiral, long Seam and Cir Seam Welding of Pipes



ACTIVITY OF THE FLUX:



CHEMICAL COMPOSITION OF FLUX:

SiO ₂ + TiO ₂	CaO + MgO	Al ₂ O ₃ + MnO	CaF ₂
35	25	30	10

(continue...)



SAW Fluxes
AUTOMELT A61S



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

With wire	C	Mn	Si
Automelt EL8	0.06	0.80	0.50
Automelt EL12	0.07	0.80	0.50
Automelt EM12K	0.06	1.10	0.60

MECHANICAL PROPERTIES OF ALL WELD METAL, TYPICAL:

With wire	Condition	UTS, MPa	YS, MPa	% E	CVN Impact (J) -20°C
Automelt EL8	AW	530	440	25	-
Automelt EL12	AW	540	450	26	-
Automelt EM12K	AW	530	450	28	50
Automelt EM12K	PW	520	430	28	60

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