SAW Fluxes

AUTOMELT B31 (AUTOMELT Gr IV)

GENERAL DESCRIPTION:

- Agglomerated Flux
- Fluoride-Basic Type Flux
- Acidic Flux having Basicity Index of 1.5
- Neutral behaviour to activity
- Multi-pass Butt and Fillet Welding
- For Carbon & Low Alloy Steels
- Suitable for Single Wire System
- Suitable for Welding Speeds of 0.40 – 0.60 m/min
- Grain Size – 0.25-2.00 mm
- Type of Current – DCEP
- Wall Neutrality Number with EH14 Wire is 7

CLASSIFICATION :

With Wire	AWS 5.17/5.23	Single / Multi-pass
AUTOMELT EL8 (AUTOMELT Gr.A)	F6A2-EL8	Multi-pass
AUTOMELT EL12	F6A2-EL12	Multi-pass
AUTOMELT EM12K	F7A2-EM12K	Multi-pass
AUTOMELT EH14	F7A4/P4-EH14	Multi-pass

TYPICAL APPLICATIONS :

- General Structural Welding
- Boiler and Pressure Vessel Fabrication

Fillet

Single V

Double V

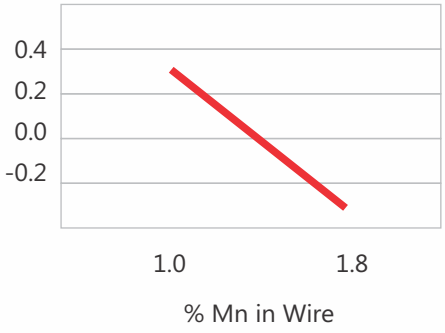
Single Wire

APPROVALS:

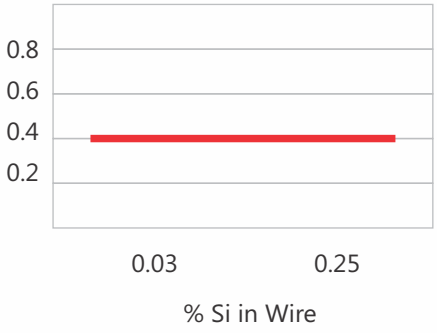
RDSO, ABS, BV, DNV, IRS, LRA, MND, IBR

ACTIVITY OF THE FLUX:

% Mn Pick-up from the flux



% Si Pick-up from the flux



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CHEMICAL COMPOSITION OF FLUX:

SiO_2 + TiO_2	CaO + MgO	Al_2O3 + MnO	CaF_2
15	20	30	35

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

With wire	C	Mn	Si
Automelt EL8 (Automelt Gr.A)	0.06	0.85	0.40
Automelt EL12	0.07	0.90	0.40
Automelt EM12K	0.07	1.20	0.50
Automelt EH14	0.07	1.50	0.40

MECHANICAL PROPERTIES OF ALL WELD METAL, TYPICAL:

With wire	Condition	UTS, MPa	YS, MPa	% E	CVN Impact		
					-20°C	-30°C	-40°C
AUTOMELT EL8 (Automelt Gr.A)	AW	470	390	28	50		
Automelt EL12	AW	480	390	27	50		
Automelt EM12K	AW	510	430	27		40	
Automelt EH14	AW	510	430	30			40
Automelt EH14	PW	510	430	30			50

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