SAW Fluxes

AUTOMELT B71

GENERAL DESCRIPTION:

- Agglomerated Flux
- Fluoride-Basic Type Flux
- Basic Flux having Basicity Index of 1.6
- Neutral behaviour to activity
- Multi-pass Butt and Fillet Welding including "two-run" technique
- For Carbon & Low Alloy Steels
- Suitable for Narrow Gap Welding
- Suitable for Single & Multi Wire twin and Tandem System
- Suitable for Welding Speeds of 0.35-0.70 m/min
- Grain Size – 0.25-1.60 mm
- Type of Current – DCEP / AC
- Wall Neutrality Number with EM12K Wire is 23

CLASSIFICATION :

With Wire	AWS 5.17/5.23	Single / Multi-pass
AUTOMELT EL8	F7A2-EL8	Multi-pass
AUTOMELT EL12	F7A2-EL12	Multi-pass
AUTOMELT EM12K	F7A4/P4-EM12K	Multi-pass
AUTOMELT EH10K	F7A4/P4-EH10K	Multi-pass
AUTOMELT EH11K	F7TA0-EH11K	**Two-Run**
AUTOMELT EH12K	F7A4/P4-EH12K	Multi-pass
AUTOMELT EH14	F7A4/P4-EH14	Multi-pass
AUTOMELT EA2	F8A2/P2-EA2-A2	Multi-pass
AUTOMELT EA4	F8A2/P2-EA4-A4	Multi-pass
AUTOMELT EA3	F8A2/P2-EA3-A3	Multi-pass
AUTOMELT EA2TiB	F9TA4-EG-G	**Two-Run**
AUTOMELT EB2	F8PZ-EB2-B2	Multi-pass
AUTOMELT EB3	F8PZ-EB3-B3	Multi-pass
AUTOMELT ENi1	F8A5-ENi1-Ni1	Multi-pass
AUTOMELT ENi2	F8A6-ENi2-Ni2	Multi-pass
AUTOMELT ENi3	F8A8/P10-ENi3-Ni3	Multi-pass

TYPICAL APPLICATIONS :

- General Structural Welding
- Long Seam and Cir Seam Welding of Pipes
- Fabrication of Pressure Vessel and Boiler
- Heavy Equipment Fabrication

APPROVALS:

RDSO, ABS, IBR

(continue...)

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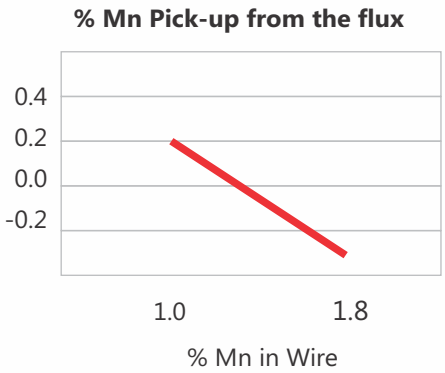
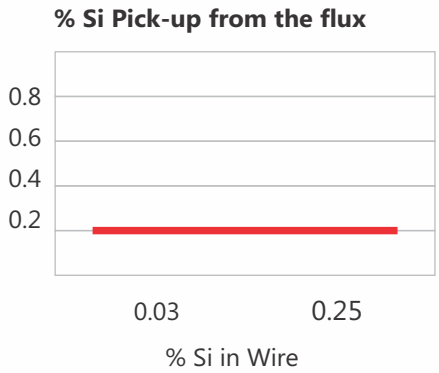
ACTIVITY OF THE FLUX:





CHEMICAL COMPOSITION OF FLUX:

SiO_2 + TiO_2	CaO + MgO	Al_2O_3 + MnO	CaF_2
15	30	30	25

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

With wire	C	Mn	Si	Ni	Cr	Mo	Other Elements
AUTOMELT EL8	0.06	1.00	0.30	--	--	--	
AUTOMELT EL12	0.08	1.00	0.30	--	--	--	
AUTOMELT EM12K	0.08	1.35	0.45	--	--	--	
AUTOMELT EH10K	0.07	1.50	0.45	--	--	--	
AUTOMELT EH11K	0.07	1.70	1.00	--	--	--	
AUTOMELT EH12K	0.08	1.55	0.45	--	--	--	
AUTOMELT EH14	0.08	1.55	0.30	--	--	--	
AUTOMELT EA2	0.08	1.35	0.30	--	--	0.50	
AUTOMELT EA4	0.08	1.50	0.30	--	--	0.50	
AUTOMELT EA3	0.08	1.55	0.30	--	--	0.50	
AUTOMELT EA2TiB	0.07	1.35	0.30	--	--	0.50	Ti – 0.02; B – 0.003
AUTOMELT EB2	0.07	1.10	0.40	--	1.10	0.50	
AUTOMELT EB3	0.07	1.10	0.40	--	2.10	1.00	
AUTOMELT ENi1	0.08	1.40	0.40	0.90	--	--	
AUTOMELT ENi2	0.09	1.40	0.40	2.20	--	--	
AUTOMELT ENi3	0.09	1.40	0.40	3.00	--	--	

(continue...)

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MECHANICAL PROPERTIES OF ALL WELD METAL, TYPICAL:

With wire	Condition	UTS, MPa	YS, MPa	% E	CVN Impact (J)				
					-30°C	-40°C	-50°C	-60°C	-70°C
Automelt EL8	AW	500	420	26	50				
Automelt EL12	AW	520	430	26	50				
Automelt EM12K	AW	530	430	26		50			
Automelt EM12K	PW1	500	420	28		60			
Automelt EH10K	AW	550	440	26		60			
Automelt EH10K	PW1	530	430	28		70			
Automelt EH11K	AW, TR	550	440	26	50J at -20°C	60			
Automelt EH12K	AW	560	450	25		70			
Automelt EH12K	PW1	540	430	27		60			
Automelt EH14	AW	550	440	26		70			
Automelt EH14	PW1	530	430	28					
Automelt EA2	AW	580	470	24	50				
Automelt EA2	PW1	560	460	25	60				
Automelt EA4	AW	600	490	24	50				
Automelt EA4	PW1	580	470	26	60				
Automelt EA3	AW	630	500	24	50				
Automelt EA3	PW1	610	480	25	60	40			
Automelt EA2TiB	AW, TR	630	580	18					
Automelt EB2	PW2	600	490	24					
Automelt EB3	PW2	630	510	24					
Automelt ENi1	AW	580	470	25			40		
Automelt ENi2	AW	600	490	25			50		
Automelt ENi3	AW	620	510	26				50	
Automelt ENi3	PW1	600	490	27					50

AW – As Welded; PW1 – After Post weld heat treatment of 620°C for 1 hour
PW2 – After Post Weld Heat treatment of 690°C for 1 hour
TW – Two Run
The chemistry and mechanical properties will depend on actual wire chemistry and arc voltage