AUTOMELT A81

AWS Classifications:		
With wire	**AWS 5.17/5.23**	**AWS 5.17M/5.23M**
Automelt EL8	F7A0 - EL8	F48A2 - EL8
Automelt EM12K	F7A0 - EM12K	F48A2 - EM12K

Characteristics:
Automelt A81 is Aluminate-rutile type of submerged arc welding for welding of general structural steels, boiler and pipe steels as well as fine grain structural steels. It is active flux with high Si and Mn pickup. This is particularly suited for twin wire, tandem and multi-wire system at relatively high speed. It is preferably used for fillet welding and single pass welding from both sides.

Basicity	Wall Neutrality No.	Grain Size (mm)
0.6*	56	0.25-1.60

*-As per Boniszewski

Flux Analysis:

$SiO_2 + TiO_2$	$CaO + MgO$	$Al_2O_3 + MnO$	CaF_2
25 %	10 %	50 %	10 %

All Weld Metal Chemistry, wt% (Typical):					
With wire	C	Mn	Si	S	P
Automelt EL8	0.06	1.10	0.65	<0.03	<0.03
Automelt EM12K	0.06	1.25	0.85	<0.03	<0.03

All weld metal properties:						
With wire	Condition	UTS	YS	% Elongation	CVN Impact (J)	
		Mpa	MPa	(L=4d)	0°C	-20°C
Automelt EL8	AW	>480	>400	>24	>40	>27
Automelt EM12K	AW	>510	>420	>24	>50	>30

AW As Welded;

Typical Applications:

Standard	Material	Multi-pass / Single pass Welding with wire electrode
API 5L	X52, X56, X60	Automelt EM12K
EN	S235, S235JRG1, S355, L360	Automelt EM12K
ASTM	ASTM A36, ASTM A31 Grades A, B, D, DS, ASTM A529 Grade 42, ASTM A570 All grades to 45, ASTM A572 Grade 42, ASTM A709 Grades 36	Automelt EM12K

Type of current / polarity: DC (+) 800A max.

Redrying Conditions: It is advisable to dry the flux at 300-350°C for 1 Hr prior to use

Packing Data	
	Net Wt. Kgs.
Poly lined paper bags (Standard)	30
Steel Drums (on demand)	100