



**SAW Fluxes**  
**AUTOMELT A82**



**GENERAL DESCRIPTION:**

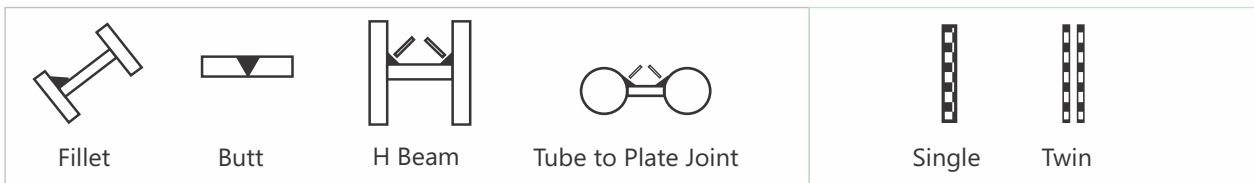
- Agglomerated Flux
- Aluminate- Rutile Type Flux
- Acidic Flux having Basicity Index of 0.6
- Active Flux with moderate Si and Mn pick-up
- For Single and Multi-pass Butt and fillet welding at very high speeds
- For Low Alloy Steels
- Suitable for Single and twin Wire system
- Suitable for Welding Speeds of 0.40-2.0 m/min
- Grain Size – 0.25-1.20 mm
- Type of Current – DC / AC 1000A
- Wall Neutrality Number with EM12K Wire is 85

**CLASSIFICATION :**

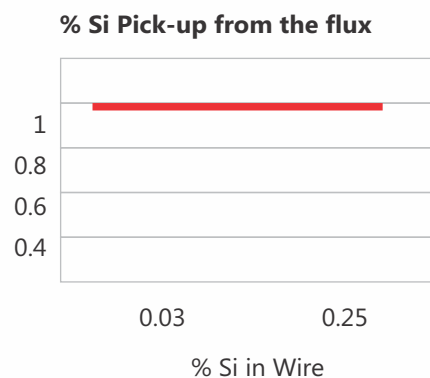
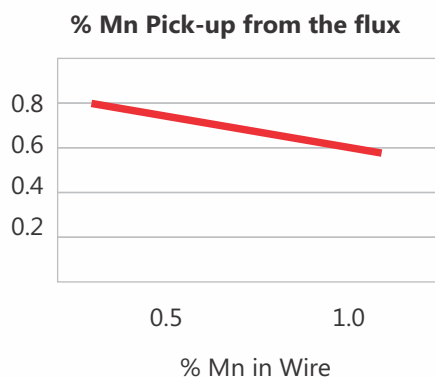
With Wire	AWS 5.17/5.23	Single / Multi-pass
<b>AUTOMELT EL8</b>	F7AZ-EL8	Limited Multi-pass
<b>AUTOMELT EL12</b>	F7AZ-EL12	Limited Multi-pass
<b>AUTOMELT EM12K</b>	F7AZ-EM12K	Limited Multi-pass

**TYPICAL APPLICATIONS :**

- Structural Welding
- High Speed Fillet Welding
- Fabrication of H & I Beams
- Fabrication of Boilers



**ACTIVITY OF THE FLUX:**



(continue...)



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**CHEMICAL COMPOSITION OF FLUX:**

<b>SiO<sub>2</sub> + TiO<sub>2</sub></b>	<b>CaO + MgO</b>	<b>Al<sub>2</sub>O<sub>3</sub> + MnO</b>	<b>CaF<sub>2</sub></b>
25	10	50	10

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

<b>With wire</b>	<b>C</b>	<b>Mn</b>	<b>Si</b>
<b>Automelt EL8</b>	0.06	1.20	1.00
<b>Automelt EL12</b>	0.07	1.20	1.00
<b>Automelt EM12K</b>	0.06	1.60	1.30

**MECHANICAL PROPERTIES OF ALL WELD METAL, TYPICAL:**

<b>With wire</b>	<b>Condition</b>	<b>UTS, MPa</b>	<b>YS, MPa</b>	<b>% E</b>	<b>CVN Impact (J) 0°C</b>
<b>Automelt EL8</b>	AW	550	460	22	40
<b>Automelt EL12</b>	AW	560	460	23	40
<b>Automelt EM12K</b>	AW	560	470	23	40

AW – As Welded

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