



## Select EM14KS

### Description:

**Select EM14KS** is a metal cored, carbon steel electrode for submerged arc welding. It is intended for single and multiple pass welding of carbon, and certain low alloy, steels in the flat and horizontal fillet positions. **Select EM14KS** contains small additions of titanium which improves weld metal toughness and helps to maintain strength after stress relieving. This electrode should be used for submerged arc welding only.

### Classification:

- EC1 per AWS A5.17, SFA 5.17.

### Characteristics:

**Select EM14KS** is designed to produce a weld deposit chemistry equivalent to that produced by solid wire, EM14K electrodes. The cored wire design results in higher deposition rates than solid wire when run at the same current level.

**Select EM14KS** allows for better control of bead penetration than solid wire. The penetration pattern for a cored electrode is broader and slightly shallower, reducing the tendency for burn through on root passes or poorly fit up joints.

### Applications:

**Select EM14KS** is ideal for those applications involving the welding of pressure vessels and structural carbon steels such as A36, A285, A515, and A516. It should be used with neutral fluxes and may be substituted anywhere a solid wire, EM14K electrode is used.

### Typical Deposit Chemistry

Wt%	C	Mn	P	S	Si	Ti
	.06	1.55	.015	.015	.55	.05

### Recommended Welding Parameters:

	<u>Amps</u>	<u>Volts</u>	<u>WFS (ipm)</u>	<u>ESO (in)</u>	<u>Dep Rate (lb/hr)</u>
5/64"	250	26-27	90	3/4"-1 1/4"	6.5
	350	29-30	160		11
	500	33-34	290		20
3/32"	275	28-29	80	1"-1 1/4"	8.5
	450	32-33	155		15.5
	600	37-38	245		24.7
1/8"	400	28-29	68	1"-1 1/4"	11.5
	550	32-33	100		17
	750	37-38	150		26.5
5/32"	425	30-31	45	1 1/4"-1 1/2"	11.5
	650	34-35	80		18.5
	900	40-42	140		38

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Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. Select-Arc disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.