Select 80

Classification:

E80T-GC per AWS A5.29, ASME SFA 5.29

Description:

Select 80 is a low alloy steel electrode for flux cored arc welding with external gas shielding. It is intended for single and multiple pass welding of carbon, and certain low alloy, steels in the flat and horizontal fillet positions. This electrode is designed for use with carbon dioxide shielding gas. Gas flow rates should be maintained at 35-50 cfh. Dew point of the gas must be at least -40°F.

Characteristics:

Select 80 is a general purpose low alloy steel electrode with extremely high welder appeal. This premium electrode has exceptionally smooth arc transfer and very low spatter. The slag viscosity promotes a flat bead with excellent tie-in, providing uniform fillets. In addition, the slag removes so easily, very little chipping is required. The high level of deoxidation facilitates welding over mill scale, rust, and other mild contaminants on the plate.

Select 80 exhibits a stable arc transfer over a broad amperage range, performing well at both the high and low ends of the range. New manufacturing technology ensures the finest in quality, consistency, and welding performance in the entire flux cored industry.

Applications:

Select 80 is ideal for those applications involving the welding of structural carbon and low alloy steels, where high deposition rates and superior penetration characteristics are preferred. Even at the higher amperage levels, flat to slightly convex beads are achievable in horizontal fillets. **Select 80** is an ideal choice for welding steels such as ASTM A515, A516, A572, and other higher strength steels.

Typical Mechanical Properties:

Ultimate Tensile Strength(psi)	88,000
Yield Strength(psi)	75,000
Percent Elongation	25
CVN (ft•lb *ƒ*) @ 0°F	48
@-20° F	42

Typical Deposit Composition:

Wt%	C	Mn	Si	P	S
	.04	1.40	.83	.010	.010

Recommended Welding Parameter:

	Optimum			Range	
Diameter	Amperage	WFS	Voltage	Amperage	Voltage
5/64"	390	250	29	280-430	26-33
3/32"	450	210	31	300-550	26-34

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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.