



Select 110C-M2

Description:

Select 110C-M2 is a low alloy steel, composite metal cored electrode for gas- shielded arc welding. This product is intended for single and multiple pass welding of certain carbon and low alloy steels, in the flat and horizontal positions, where a minimum tensile strength of 110,000 psi is required in the deposited weld metal. The recommended shielding gas is 95% minimum argon-balance oxygen. Mixtures of 92% minimum argon-balance carbon dioxide should provide similar results with respect to weldment performance. Other argon-carbon dioxide mixtures may be employed, with a minimum of 75-80% argon. Flow rates should be maintained at 35-50 cfh, with a dew point of at least -40° F.

Classification:

- E110C-G per AWS A5.28, SFA 5.28.

Characteristics:

Select 110C-M2 is a premium, composite metal cored electrode, exhibiting superb welder appeal and outstanding mechanical properties. Arc transfer is a pure spray, with virtually no spatter emission. There are many advantages in using composite metal cored, rather than solid wires, such as: faster travel speeds, leading to increased productivity; enhanced fusion into sidewalls, eliminating "cold-lap"; and minimal tendency for subsurface porosity. **Select 110C-M2** is ideal for those applications where the slag residue and fume emissions of flux cored electrodes are unwanted. Proprietary manufacturing technology ensures the highest degree of quality, consistency, and welding performance in the industry.

Applications:

Select 110C-M2 is an ideal choice for joining low alloy, high strength steels such as HY-100 and A514. Earthmoving equipment, mining trucks and machinery, and heavy equipment trailers are some areas where these steels may be utilized. This electrode may also be used for overlay or surfacing in certain applications. As with all higher strength filler metals, care must be taken to maintain proper heat input, interpass temperatures, and welding parameters.

Typical Mechanical Properties:

	98% Ar/2% O ₂
Ultimate Tensile Strength	115,600
Yield Strength	106,400
Percent Elongation	16
CVN (ft•lb f) @ -20° F	42
@ -60° F	28

Typical Deposit Composition (98% Ar/2% O₂):

Wt%	C	Mn	S	P	Si	Cr	Ni	Mo
	.03	1.71	.010	.010	.42	.19	2.00	.55

Recommended Welding Parameters: Metal Cored – Argon/Oxygen

Diam. (in.)	Amperage	Optimum		Amperage	Range		ESO
		WFS	Voltage		WFS	Voltage	
.035	200	550	25	180-320	350-750	23-29	½" -¾"
.045	255	410	26	180-330	240-600	22-28	½"-1"
.052	300	350	26	220-460	220-620	23-30	½"-1"
1/16	360	300	26	230-520	160-500	22-31	¾"-1¼ "

Rev 0 (03/11/2014)

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.