

DESCRIPTION

Executive 80C-Ni1 is a composite metal cored wire for welding a variety of low temperature or low alloy steels and has a weld deposit similar to that of E8018-C3 covered electrodes.

This wire can be used for both single and multiple pass welding in either the flat or horizontal position.

APPLICATIONS & FEATURES

Executive 80C-Ni1 is well suited for low alloy high strength steels requiring good toughness at temperatures as low as -50°F. It has Exceptional welder appeal with very low spatter and low fume generation. Executive 80C-Ni1 has an excellent bead profile with exceptional CVN toughness at sub-zero temperatures.

Typical applications include earth moving and offshore equipment, as well as mining machinery.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

With 98% Ar / 2% CO₂

C	Mn	Si	P	S	Ni	
0.03	1.45	0.50	0.009	0.010	0.95	
Tensile Strength:		92,500 PSI min		Charpy Impact:		28 ft-lb at -50°F (-45° C)
Yield Strength:		79,800 PSI min		Elongation:		26%

With 85% Ar / 15% CO₂

C	Mn	Si	P	S	Ni	
0.005	1.40	0.53	0.009	0.10	0.94	
Tensile Strength:		87,000 PSI min		Charpy Impact:		30 ft-lb at -50°F (-45° C)
Yield Strength:		72,100 PSI min		Elongation:		25%

TYPICAL WELDING PARAMETERS

85% Ar / 15% CO ₂		OPERATING RANGE		OPTIMUM SETTINGS		
Diameter	Voltage*	Amperage	Wire Feed Speed (in./min)	Voltage*	Amperage	Wire Feed Speed (in./min)
.045"	24-30	180-300	210-460	21-24	255	410
.062"	23-34	210-350	170-370	26-29	300	300

*For Ar/O₂ mixes, lower voltage by 3 volts.

STANDARD PACKAGING

Spools	33-lb spools	Drums	500-lb Drums
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CLASSIFICATION

AWS A5.28/ASME SFA A5.28 Class E80C-Ni1 H4

