

EXECUTIVE 70S-3 CC

CARBON STEEL

SOLID WIRE TECHNICAL DATA SHEET

DESCRIPTION

Executive 70S-3 CC is a high quality, general purpose welding wire widely used for GMAW fabrication of mild steel material.

Executive 70S-3 CC is designed to be the ultimate in trouble free welding performance with smooth feedability and excellent arc stability. The weld puddle of this wire is more fluid than ER70S-2, producing better wetting characteristics and a flatter bead.

This wire is specially designed to reduce wear on consumables and produce great clean welds that require minimal clean-up. This is all to help improve arc on time to keep you welding.

APPLICATIONS & FEATURES

Typical applications include automotive, structural steel, carbon steel pipe, and plate. Suitable shielding gases for GMAW applications using ER70S-3 wires include Argon/CO₂, or Argon/O₂ with higher Argon content as well as 100% CO₂. While designed for use on clean plate Executive 70S-3 CC has moderate levels of silicon and manganese deoxidizers will allow you to weld through light mill scale. This wire is also suitable for laser welding and WAAM applications (Wire Arc Additive Manufacturing, aka Metal 3D printing).

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

С	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Sn	Αl	N
0.07	0.6	1.21	0.01	0.008	0.50	0.15	0.02	0.15	0.004	0.004	0.002	.005

Tensile Strength: 82,600 PSI min Yield Strength: 69,500 PSI min Elongation: 33%

Charpy V-Notch: 145 ft/lb at 32°F / 0°C

129 ft/lb at -4°F / -20°C

TYPICAL WELDING PARAMETERS

Process	Diameter	Voltage	Amperage	Speed (in/min)	Shielding Gas		
GMAW - Short	.035"	18	80	100			
		19	120	150	Ar/CO Plands		
		22	22 175 250		Ar / CO ₂ Blends Ar / O ₂ Blends		
	.045"	19	145	125	100% CO ₂		
		20	165	150	100% CO2		
		21	200	200			
- Spray	.035"	23	195	375			
		29	230	500			
		30	275	600	Ar / CO ₂ Blends		
	.045"	27	285	350	Ar / O ₂ Blends		
		30	335	475			
		30	340	500			

STANDARD PACKAGING

GMAW (MIG) 33/44-lb spools 1,980/2,640-lb pallet 550-lb drums 2,200-lb pallet

CLASSIFICATION

AWS/SFA 5.18, Class ER70S-3