

SM-3A

☆AWS A5.18 E70C-GM-H4

For Low-Alloy Steel

APPLICATIONS

Seamless flux cored wire for Ar-CO₂ gas shielded arc welding of low temperature service steel for offshore structures, etc.

CHARACTERISTICS

SM-3A is a seamless metal type flux cored arc welding wire to be used with Ar-20%CO₂ shielding gas. It has been designed of root pass in all position in the short-circuit arc range, and flat position, horizontal position and fillet welds in the spray arc range.

It assures excellent impact toughness at low temperature down to -40°C.

It has also good usability with high efficiency, less spattering and beautiful bead appearance.

Moreover, due to its seamless surface, it provides various advantages better than conventional open-seam flux cored wires.

GUIDELINES FOR USAGE

1. Select optimum welding conditions and control heat input in accordance with plate thickness and required toughness.
2. A suitable shield gas flow rate is 20~25 ℓ /min.
3. For others, see GUIDELINES FOR USAGE 1~4 of SF-1.

WELDING POSITION



■ TYPICAL CHEMICAL COMPOSITION OF WELD METAL (%)

Shield Gas	C	Si	Mn	P	S
Ar+20%CO ₂	0.05	0.66	1.69	0.008	0.013

■ TYPICAL MECHANICAL PROPERTIES OF WELD METAL

Yield Strength, MPa	Tensile Strength, MPa	Elongation, %	Charpy 2V-notch, J
			-40°C
540	600	29	72

■ SIZES & RECOMMENDED CURRENT RANGE<DC(+)>

Diameter (mm)		1.2	1.4
Current A	F	200~350	250~400
	H-Fil	200~350	250~400