

DESCRIPTION

Executive 71T-12MJ is an all-position flux-cored wire designed for single or multi-pass applications that demand exceptional weld metal toughness. It maintains excellent impact toughness down to -50°F (-46°C) in the as-welded and typical post weld heat treated (PWHT) condition.

Executive 71T-12MJ also boasts a smooth arc with fast freezing slag and low spatter levels, characteristics shared with other executive flux-cored wires. Additionally, unlike many other products in the market, Executive 71T-12MJ supports an "H4" low-hydrogen designation

APPLICATIONS & FEATURES

Applications include off-shore oil components, shipbuilding, pressure vessels, structural and bridge fabrication and heavy equipment where exceptional charpy impact/low temperature toughness is required.

The precisely optimized chemical composition of the weld metal imparts exceptional mechanical properties, making it well-suited for even the most stringent industry specifications.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Mn	Si	P	S	Cu	Ni	Cr	Mo	V
0.04	1.42	0.51	0.01	0.01	0.01	0.42	0.03	0.01	0.005
Tensile Strength:		80,500 PSI min	Diffusible Hydrogen:		3.21 ml/100g	Charpy Impact:		111 ft-lb (150 J) at -50°F (-46°C)	
Yield Strength:		72,500 PSI min	Elongation:		29%	Radiographic Test:		Acceptable	
Tensile Strength:		80,200 PSI min	Diffusible Hydrogen:		3.21 ml/100g	Charpy Impact:		71 ft-lb (96 J) at -50°F (-46°C)	
Yield Strength:		70,600 PSI min	Elongation:		31%	Radiographic Test:		Acceptable	

*PWHT 1hr @ 1148°F (620°C)

TYPICAL WELDING PARAMETERS

Diameter	Voltage	Amperage	Wire Feed Speed (in./min)	Stick-Out	Flow Rate (SCFH)	Shielding Gas
.045"	23-26	120	140	5/8 - 3/4"	40-50	75% Ar / 25% CO ₂
	25-28	160	200			
	27-30	200	290			
	28-30	250	400			
.062"	24-27	180	100	3/4" - 1"	40-50	75% Ar / 25% CO ₂
	25-28	240	165			
	26-29	260	190			
	29-31	300	250			

STANDARD PACKAGING

Spools	44-lb plastic spools	2,640-lb pallet
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CLASSIFICATION

AWS A5.20/ASME SFA A5.20 E71T-12MJ H4
 AWS A5.36(M) / ASME SFA-5.36(M) Class E71T12-M21A5(A4)/M21P5(P4)-CS2-H4
 CWB to CSA W48 Class E491T1-M21A5(P5)-CS2-H4
 Meets AWS D1.8 for Seismic Applications. ABS 4YSA H5

