

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"	21-23	160	200	5/8 - 3/4"	40-50	75% Ar / 25% CO ₂
	24-26	225	310			
	27-29	275	400			
	30-31	300	435			
.062"	25-27	240	165	3/4" - 1"	40-50	75% Ar / 25% CO ₂
	26-28	260	190			
	29-30	300	250			
	30-33	360	310			

STANDARD PACKAGING

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

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

