



Smoothcor™ 71T-12MJ

Specifications: AWS A5.20 /ASME SFA5.20 Class E71T-12CJ-H4, E71T-12MJ-H4

Description: Smoothcor™ E71T-12MJ is a premium, flux cored, gas shielded electrode designed for single and multiple pass welding of carbon steels in all positions. Applications include those that were previously reserved for EXX18 electrodes, such as offshore platforms and piping systems, pressure vessels, oil and gas pipelines structural steel, and bridge fabrication. Smoothcor™ E71T-12MJ demonstrates excellent CVN toughness, excellent bead geometry, Low fume generation rates and diffusible hydrogen level, exceptional resistance to moisture pickup and exceeds all recommended requirements

Recommended shielding gas: 100% CO₂, 75% Argon/25% CO₂ 35-50 cfh

Typical Deposit Chemistry

	C	Si	Mn	P	S	Ni
100% CO ₂	.06	.42	1.30	.009	.009	.39
75%Ar/25% CO ₂	.06	.47	1.51	.009	.009	.41

Typical Mechanical Properties

	100% CO ₂	75%Ar/25% CO ₂
Tensile Strength (psi)	81,500	88,000
Yield Strength (psi)	66,700	76,000
Elongation % in 2"	28	28

Typical Charpy V-Notch Impact Values (As welded)

CVN Impact Energy	100% CO ₂	75%Ar/25% CO ₂
ft•lbs @ 0°F	110 ft•lbs	101 ft•lbs
ft•lbs @ -20°F	95 ft•lbs	85 ft•lbs
ft•lbs @ -50°F	37 ft•lbs	40 ft•lbs

Recommended Welding Parameters*

Diameter	Position	Amps	Volts	WFS
.045"	Flat	100-200	21-32	282
	Overhead	150-280	21-29	265
	Vertical Up	100-230	21-28	265
1/16"	Flat	150-400	22-34	300
	Overhead	150-310	22-28	160
	Vertical Up	150-280	22-27	160

*With CO₂ shielding gas – decrease volts by 1.0-1.5 for 75Ar/25CO₂

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus, the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.