

DuraMax E71T-1 Flux Cored Wire DM71T

Classification: E71T-XX AWS A5.20 / ASME SFA 5.20

Description, Characteristics & Applications:

DuraMax E71T-1 is designed for welding of 490MPa high tensile steel with slow freezing slag system. Typical applications include machineries, shipbuilding, offshore structures, bridges and general fabrications.

CHARACTERISTICS ON USAGE:

- 1- Wire is a titania type of flux cored wire for all-position welding.
- 2- It features excellent mechanical properties, easy slag removal, low spatter loss
- 3- DM71T-1 has very efficient welding due to higher deposition rate particularly.
- 4- The shielding gas should be used 100%CO₂ or 75% Ar+25%CO₂ for welding

Typical Chemical Composition (%)

C	Mn	Si	P	S	Cr	Ni	Mo	V	Cu
0.18 max	1.75 max	0.90 max	0.03 max	0.03 max	0.02 max	0.50 max	0.30 max	0.08 max	0.35 max

Typical Mechanical Properties as Welded

	Tensile Strength	Yield Strength	Elongation (%)	Hardness	Ferrite WRC (FN)	CVN Impacts (J)
						@ -20 °C
AWS	≥ 490	≥ 390	≥ 22	-----	-----	≥ 20
Typical Values	580	520	29	-----	-----	50 (J)

Diameter	0.035	0.045	0.052	1/16
Polarity	DC+	DC+	DC+	DC+
Shielding Gas Used	75% Ar + 25% CO ₂	75% Ar + 25% CO ₂	75% Ar + 25% CO ₂	75% Ar + 25% CO ₂
Voltage (V)	20	24	24	25
Wire Feed Speed (in/min)	160	300	300	250
Current (A)	120	200	210	210
Preheat Temp °C (F)	20 (70)	20 (70)	20 (70)	20 (70)
Interpass Temp °C (F)	150 (300)	150 (300)	150 (300)	150 (300)

NOTE: Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

POLARITY: DCEP or AC

DCEP = DC, Electrode Positive (reverse polarity) has the most weld penetration.

AC: medium weld penetration (can have more spatter)

WELDING POSITIONS: All Positions

USE LESS AMPS ON THIN METAL; MORE AMPS ON THICK METAL