



# Smoothcor® 100T1-K3C

**Classification:** AWS A5.29/ ASME SFA 5.29 E101T1-K3C

**Description:** Smoothcor® 100T1-K3C is a low alloy steel, flux cored electrodes designed for use with 100% CO<sub>2</sub> gas shielding. This electrode is intended for single and multiple pass welding, in all positions, of low alloy steels, requiring 100,000 psi minimum tensile strength in the weld deposit. Applications include A514 and HY-80 steels. These steels are used in fabrication of crane assemblies, mining machinery and earthmoving equipment. Recommended gas flow rates are 35- 50 cfh, and CO<sub>2</sub> should be used with a dew point of at least -40° F.

**Typical Weld Deposit Chemistry: %**

C	Mn	P	S	Si	Ni	Mo
.06	1.20	.01	.01	.30	1.75	.35

**Typical Mechanical Properties: (All weld metal as welded)**

Tensile Strength	105,700 psi
Yield Strength	94,000 psi
Elongation	23%
CVN (ft•lb f @ 0°F)	40

**Typical Welding Parameters – Carbon & Low Alloy – Flux Cored -All position-CO<sub>2</sub> - DCEP**

Dia.	Position	Operating Range		Optimum			
		Amps	Volts	Amps	WFS (ipm)	Volts	ESO
.045"	Flat	130-300	21-32	250	450	28	½ - 1"
	Overhead	150-280	21-30	190	305	26	½ - 1"
	Vertical Up	130-260	21-29	190	305	26	½ - 1"
1/16"	Flat	150-400	22-34	330	330	29	½"-1"
	Overhead	150-310	22-28	225	180	26	½ -1"
	Vertical Up	150-280	22-27	225	180	25	½ - 1"

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.