



# Smoothcor<sup>®</sup> 80T5-B2

**Classification:** AWS A5.29 / ASME SFA 5.29 E80T5-B2C

**Description:** Smoothcor 80T5-B2 is a 1 ¼% Cr, ½% Mo low alloy steel flux cored wire used for single and multiple pass welding of Cr-Mo steels, including A387 Gr. 11 plate and A335 P11 pipe, that are used in high temperature applications that require creep resistance. The basic slag offers excellent mechanical properties but welding is limited to horizontal fillets and the flat position. Smoothcor 80T5-B2 exhibits better CVN toughness than rutile slag electrodes when used in the fabrication of boilers, heat exchangers and pressure vessels. Shielding gas: 100% CO<sub>2</sub>. 40-55 cfh

**Typical Deposit Chemistry: %**

	C	Mn	P	S	Si	Cr	Mo
CO <sub>2</sub>	.06	.70	.01	.01	.40	1.25	.52

**Typical Mechanical Properties:**

SR 1 hr. @ 1275°F	
	CO <sub>2</sub>
Tensile Strength(psi)	94,200
Yield Strength (psi)	84,200
Elongation	20
CVN (ft•lb f) @ -20°F	40

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

Dia.	Operating Range			Optimum			
	Amps	WFS (ipm)	Volts	Amps	WFS (ipm)	Volts	ESO
.045"	130-330	160-670	21-32	250	450	28	½ - 1"
1/16"	150-400	130-500	22-34	330	330	29	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.