



Smoothcor 100T5-D2

Classification: AWS A5.29/ASME SFA 5.29 E100T5-D2

Description: **Smoothcor 100T5-D2** is a low alloy steel electrode with a basic slag system used to weld certain manganese-molybdenum steels and castings. This electrode is intended for single and multiple pass welding in horizontal fillets and the flat position. **Smoothcor 100T5-D2** produces deposited weld metal of approximately 2% manganese and .5% molybdenum, used primarily to weld steels such as ASTM A302 GrB and castings such as ASTM A49, A291 and A735. It has excellent low temperature CVN toughness, Basic slag provides weld metal with low levels of diffusible hydrogen. The weld deposit is suitable to match composition of Mn-Mo castings. It is a direct replacement for E10018-D2. Shielding gas: 75%Ar/25%CO₂. Welding Position: Flat Horizontal.

Typical Weld Deposit Chemistry

C	Mn	P	S	Si	Mo
.05	2.06	.01	.01	.45	.48

Typical Mechanical Properties

	SR-12hr. @1150°F
Tensile Strength	102,600 psi
Yield Strength	90,700 psi
Elongation	24%
CVN (ft•lb f) @ -40°F	30

Typical Welding Parameters – Carbon & Low Alloy – Flat & Horizontal – DCEP

Dia.	Operating Range			Optimum			
	Amps	WFS (ipm)	Volts	Amps	WFS (ipm)	Volts	ESO
.045"	130-300	160-670	21-32	250	450	27	½ - 1"
1/16"	150-400	130-500	22-34	330	330	28	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.