



Smoothcor 100T5-D2

Classification:

E100T5-D2 per AWS A5.29, SFA 5.29

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. The preferred shielding gas for **Smoothcor 100T5-D2** is 100% carbon dioxide. Recommended gas flow rates are 35-50 cfh, and welding grade carbon dioxide should be used with a dew point of at least -40° F.

Applications:

Smoothcor 100T5-D2 produces deposited weld metal of approximately 1.50% manganese and 0.50% molybdenum, used primarily to weld steels such as ASTM A302 GrB and castings such as ASTM A49, A291 and A735.

Typical Mechanical Properties:

	<u>All Weld Metal</u> <u>As Welded</u>
Ultimate Tensile Strength (psi)	100,600
Yield Strength (psi)	90,700
Percent Elongation	24
CVN (ft-lb f) @ -40° F	30

Typical Weld Deposit Chemistry:

<u>Wt%</u>	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>	<u>Mo</u>
	0.05	1.75	0.010	0.010	0.45	0.48

Suggested Welding Parameters:

<u>Diameter</u>	<u>Position</u>	<u>Optimum</u>			<u>Range</u>	
		<u>Amperage</u>	<u>Voltage</u>	<u>WFS</u>	<u>Amperage</u>	<u>Voltage</u>
3/32"	Flat/Horizontal	400	28	185	350-550	26-34
1/16"	Flat/Horizontal	300	29	320	250-450	26-34
.045"	Flat/Horizontal	250	28	380	120-320	22-31

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.