Select 91-D3

Description:

Select 91-D3 is a gas-shielded, low alloy steel electrode intended to match the mechanical properties and corrosion resistance of certain pressure vessel steels. This electrode can be used for single and multiple pass welding in horizontal fillets and the flat position.

Classification:

- E90T1-D3C per AWS A5.29, ASME SFA 5.29

Characteristics:

- Good welder appeal and excellent bead profile
- Low spatter level
- High strength and corrosion resistance of deposit matches the appropriate steels

Applications:

Select 91-D3 is a manganese-molybdenum flux cored electrode which is well suited to weld steels such as ASTM A302 GrB and manganese-molybdenum castings such as ASTM A49, A291 and A735.

Typical Mechanical Properties

Ultimate Tensile Strength (psi)	96,000
Yield Strength (psi)	84,400
Percent Elongation	24
CVN (ft • lb *f*) @ - 20° F	33

Typical Deposit Composition

Wt%	C	Mn	Mo	Si	P	S
	.06	1.30	.50	.38	.010	.010

Recommended Welding Parameters:

	Optimum			Range	
Diameter	Amperage	WFS	Voltage	Amperage	Voltage
1/16”	350	300	29	150-400	22-34
5/64"	390	250	29	280-430	26-33
3/32"	450	210	31	275-550	26-34

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