

Select 105-D2

Description:

- A low alloy steel electrode for gas shielded, flux cored arc welding
- The lime-fluoride (chemically basic) slag promotes low oxygen weld deposits with excellent mechanical properties
- The D2 alloy system is well suited for welding and repair of manganese-moly castings
- The highly basic slag system provides welds with low levels of diffusible hydrogen
- A good choice for welding steels such as ASTM A302, Grade B, and castings such as ASTM A49, A291, and A735
- Optimized for use with 100% CO₂ shielding gas

Classification:

- E100T5-D2C per AWS A5.29, ASME SFA5.29
- E100T5-C1P4-D2 per AWS A5.36, ASME SFA5.36

Typical Mechanical Properties (100% CO₂):

	SR 1 Hr @ 1150° F
Ultimate Tensile Strength (psi)	102,600
Yield Strength (psi)	90,700
Percent Elongation	24
CVN (ft • lbf) @ -40°F	30

Typical Deposit Composition (100% CO₂):

Wt %	C	Mn	Mo	Si	P	S
	.05	2.06	.48	.45	.010	.010

Suggested Welding Parameters:

Diameter	Optimum			Range	
	Amperage	Voltage	WFS	Amperage	Voltage
1/8"	475	28	115	375-650	26-36
3/32"	400	28	185	350-550	26-34
5/64"	350	28	240	280-500	26-33
1/16"	270	27	280	250-450	26-34
.045"	225	27	330	120-320	22-31

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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.