Select 810-Ni2

Low Alloy / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- Exhibits a spray-like arc transfer and low spatter.
- Intended for single and multiple pass welding, on carbon and low alloy steels requiring good charpy v-notch toughness at temperatures as low as -40F.
- Designed as a dual gas electrode, 100%CO2 and 75-80% argon – balance CO2.
- Typical steels welded with this electrode include ASTM A572, A302, A588, and A734.
- Select 810-Ni2 is ideal for applications such as offshore platform construction, shipbuilding, earthmoving and mining machinery.

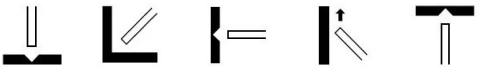
CONFORMANCES

AWS A5.29	E81T1-Ni2C
	E81T1-Ni2M
ASME SFA 5.29	E81T1-Ni2C
	E81T1-Ni2M

DIAMETERS (in (mm))

0.045 (1.2), 0.052 (1.3), 1/16 (1.6), 5/64 (2.0)

POSITIONS



SHIELDING GAS

75-80% Ar/Balance CO2, 100% CO2
Flow Rate: 40 - 50 CFM

POLARITY

Direct Current Electrode Positive (DCEP)

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	C	Mn	Ni	P	S	Si
100%CO2	0.04	0.83	2.40	0.010	0.010	0.29
75%Ar / 25%CO2	0.05	0.90	2.40	0.010	0.010	0.30

TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ -40°F (-40°C) ft-lb (J)
100%CO2	89 (614)	77 (531)	25	As-Welded	-	30 (41)
75%Ar / 25%CO2	91 (628)	82 (566)	24	As-Welded	-	40 (54)

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RECOMMENDED WELDING PARAMETERS

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.045 (1.2 mm)	75% Ar/25% CO2	All Positions	200 (5.1)	145	22	1/2 - 5/8 (13 - 16)
		All Positions	235 (6.0)	160	23	1/2 - 5/8 (13 - 16)
		All Positions	300 (7.6)	185	25	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	375 (9.5)	215	26	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	440 (11.2)	235	28	5/8 - 3/4 (16 - 19)
0.052 (1.3 mm)	75% Ar/25% CO2	All Positions	170 (4.3)	155	22	5/8 - 3/4 (16 - 19)
		All Positions	200 (5.1)	175	23	5/8 - 3/4 (16 - 19)
		All Positions	250 (6.4)	225	25	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	310 (7.9)	250	26	3/4 - 1 (19 - 25)
		Flat & Horizontal	395 (10.0)	280	28	3/4 - 1 (19 - 25)
1/16 (1.6 mm)	75% Ar/25% CO2	All Positions	125 (3.2)	165	22	5/8 - 3/4 (16 - 19)
		All Positions	150 (3.8)	195	23	5/8 - 3/4 (16 - 19)
		All Positions	185 (4.7)	225	25	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	265 (6.7)	280	26	3/4 - 1 (19 - 25)
		Flat & Horizontal	325 (8.3)	320	28	3/4 - 1 (19 - 25)
5/64 (2.0 mm)	75% Ar/25% CO2	All Positions	100 (2.5)	195	22	3/4 (19)
		All Positions	110 (2.8)	210	23	3/4 (19)
		All Positions	130 (3.3)	240	25	3/4 (19)
		Flat & Horizontal	200 (5.1)	310	26	1 - 1 1/4 (25 - 32)
		Flat & Horizontal	225 (5.7)	350	28	1 - 1 1/4 (25 - 32)

** WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance*

APPROVALS

Agency	Approval	Shielding Gas	Diameter(s) in (mm)
ABS	3YSA	M21 (75%Ar / 25%CO2)	0.035 (0.9) - 1/16 (1.6)
		C1 (100%CO2)	0.035 (0.9) - 1/16 (1.6)
MILITARY	MIL-81T1-Ni2C	C1 (100%CO2)	()

PACKAGING [lbs [kgs]]

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum

**Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.*

STORAGE AND HANDLING

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.

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