

Select 4130C

Low Alloy / Gas Shielded / Metal Cored

PRODUCT DATA SHEET

FEATURES

- Can be used for welding 4130, 4140, 8630, and similar alloy steels that are to be post weld heat treated.
- This electrode was designed to meet the properties of quenched and tempered steels, and therefore should not be used for as-welded applications.
- The recommended shielding gas is 98%Ar / 2%O₂, however, 90%Ar / 10%CO₂ may be used as well.
- Contains less than 1% nickel, making this electrode suitable for most sour service applications.

DIAMETERS (in [mm])

0.035 (0.9), 0.045 (1.2), 1/16 (1.6)

POSITIONS



SHIELDING GAS

98% Ar / 2% O₂, 90% Ar / 10%CO₂

Flow Rate: 40 - 50 CFM

POLARITY

Direct Current Electrode Positive (DCEP)

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	C	Cr	Mn	Mo	Ni	P	S	Si
90%Ar / 10%CO ₂	0.21	0.72	1.42	0.21	0.85	0.010	0.012	0.84
98%Ar / 2%O ₂	0.21	0.65	1.32	0.20	0.68	0.006	0.010	0.75

TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ -20°F (-30°C) ft-lb (J)	CVN @ -40°F (-40°C) ft-lb (J)
90%Ar / 10%CO ₂	100 (690)	81 (557)	25	PWHT	1175F for 32 hrs	30 (41)	26 (35)
90%Ar / 10%CO ₂	107 (738)	88 (607)	25	PWHT	1175F for 4 hrs	33 (45)	26 (35)



Revision: 9/27/2022

Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. 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.

600 Enterprise Drive, P.O. Box 259, Fort Loramie, Ohio 45845-0259 • 800-341-5215 • www.Select-Arc.com

RECOMMENDED WELDING PARAMETERS

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.035 (0.9 mm)	90% Ar/10% CO2	Flat & Horizontal	345 (8.8)	170	24	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	425 (10.8)	190	25	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	475 (12.1)	210	26.5	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	570 (14.5)	225	29	5/8 - 3/4 (16 - 19)
0.045 (1.2 mm)	90% Ar/10% CO2	Flat & Horizontal	260 (6.6)	200	24	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	305 (7.7)	220	25	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	360 (9.1)	240	26.5	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	405 (10.3)	255	28	5/8 - 3/4 (16 - 19)
1/16 (1.6 mm)	90% Ar/10% CO2	Flat & Horizontal	200 (5.1)	250	24	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	245 (6.2)	290	25	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	275 (7.0)	310	26.5	3/4 - 1 (19 - 25)
		Flat & Horizontal	285 (7.2)	330	28	3/4 - 1 (19 - 25)

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

Welding parameters are for 90% Ar/10% CO2, at higher levels of argon the voltage should be gradually decreased: 1-2 volts for 98% Ar/2% O2.

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.



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. 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.