Low Alloy / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

#### **FEATURES**

- Select 4130LN is a basic flux cored electrode for use with Ar-25% CO2 shielding gas.
- This electrode is designed to weld 4130, and other steels of similar composition, such as 4140 and 8630. Also commonly
  used to repair casting.
- Provides a close match to steel properties following a required post weld heat treatment.
- The deposit contains less than 1% nickel making this electrode suitable for most oil field applications.

### **DIAMETERS (in (mm))**

0.045 (1.2), 1/16 (1.6), 3/32 (2.4)

### **POSITIONS**



# **SHIELDING GAS**

75% Ar / 25% CO2 Flow Rate: 40 - 50 CFH

#### **POLARITY**

Direct Current Electrode Positive (DCEP)

## **TYPICAL WELD DEPOSIT CHEMISTRY (WT%)**

Shielding Gas	С	Cr	Mn	Мо	Ni	P	S	Si
75%Ar / 25%CO2	0.25	0.58	1.64	0.17	0.74	0.008	0.012	0.35

# **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)
75%Ar / 25%CO2	109 (752)	90 (621)	23	PWHT	1200°F for 2 hrs	33 (45)	23 (31)



Revision: 1/17/2025

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.

#### **RECOMMENDED WELDING PARAMETERS \*\***

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
		Flat & Horizontal	275 (7.0)	160	24	1/2 - 5/8 (13 - 16)
0.045 (1.2 mm)	75% Ar/25% CO2	Flat & Horizontal	350 (8.9)	190	26	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	435 (11.0)	220	28	5/8 - 3/4 (16 - 19)
1/16 (1.6 mm)	75% Ar/25% CO2	Flat & Horizontal	250 (6.4)	265	24	3/4 (19)
		Flat & Horizontal	280 (7.1)	290	26	3/4 - 1 (19 - 25)
		Flat & Horizontal	315 (8.0)	315	28	3/4 - 1 (19 - 25)
3/32 (2.4 mm)		Flat & Horizontal	145 (3.7)	320	24	1 1/4 (32)
	75% Ar/25% CO2	Flat & Horizontal	160 (4.1)	345	26	1 1/4 - 1 1/2 (32 - 38)
		Flat & Horizontal	170 (4.3)	370	28	1 1/4 - 1 1/2 (32 - 38)

<sup>\*</sup> WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

# 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

#### 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.



Revision: 1/17/2025

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.

wrs = wire reed speed, Crwb = contact rip to work bisance
\*\*The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "allposition" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.

<sup>\*</sup>Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.