



# Unibraze 4130LN

**Description:** Unibraze 4130LN is a basic flux cored electrode designed to closely match the properties of certain low alloy, quenched and tempered steels following post weld heat treatment. It is not recommended for as-welded applications. The basic slag system assures low weld metal hydrogen in the weld area, which is critical in preventing cracking in sensitive steels like 4130. 4130LN is designed to weld 4130 and other steels of similar composition, such as 4140 and 8630. The deposit contains less than 1% nickel and is ideal for most oil field applications.

Shielding gas: 75% Ar/25% CO<sub>2</sub>. Welding position: Flat and horizontal.

## Typical Weld Deposit Chemistry

C	Mn	P	S	Si	Ni	Cr	Mo
.20	1.18	.008	.013	.70	.80	.64	.21

## Typical Mechanical Properties

	SR-2hr. @1200°F	Austenitize 1625°F, Water Quench, Temper 1100°F: 1 hr.
Tensile Strength	116,000 psi	125,000 psi
Yield Strength	99,000 psi	107,000 psi
Elongation	21%	18%
Reduction of Area	55	58

## Typical Welding Parameters – Carbon & Low Alloy – Flat & Horizontal – DCEP

Dia.	Operating Range			Optimum			
	Amps	WFS (ipm)	Volts	Amps	WFS (ipm)	Volts	ESO
.045"	130-300	160-670	21-32	250	450	27	½ - 1"
1/16"	150-400	130-500	22-34	330	330	28	½"-1"

*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. Unibraze disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.*