



COR-MET, INC.  
12500 GRAND RIVER ROAD  
BRIGHTON, MI 48116-8326  
(810) 227-3251  
800-848-2719  
FAX: (810) 227-9266  
[www.cor-met.com](http://www.cor-met.com)

## COR<sup>®</sup>ALLOY 4130LN E

### DESCRIPTION

COR<sup>™</sup>ALLOY 4130LN E is a coated electrode with a modified 4130 chemistry to match heat treat properties of AISI 4130, 8630 and similar alloys. This electrode provides improved crack resistance when joining 4130 and 4140 and contains less than 1.0% nickel.

### APPLICATIONS

4130LN E is typically used to build up and join all types of dies, forgings, castings, plates, and other machine parts made from medium carbon, low alloy steels. 4130LN E finds specific usage in joining 4130 or 4140 steels that will be fully heat treated, or flame hardened.

### PROCEDURE

Preheat and maintain the interpass temperature at 500-700°F when welding 4130 and 4140 base materials. Slow cool after welding. Heat treat further according to required properties.

### WELDING PARAMETERS

Size	Amps
1/8"	110-140
5/32"	140-170
3/16"	170-220
1/4"	220-300

### MECHANICAL PROPERTIES UNDILUTED WELD METAL

Preheat and interpass:	500-700°F, slow cool to room temperature
Hardness:	31 HRC
Temper:	1100°F, 3 hrs at temperature, slow cool
Hardness:	25 HRC
Yield Strength:	96,000 psi
Tensile Strength:	116,800 psi
Elongation:	22.5 %
Reduction in Area:	60 %

### TYPICAL CHEMISTRY

C	0.23	Cr	0.74	P	0.015
Mn	0.57	Ni	0.91	S	0.007
Si	0.15	Mo	0.27	Fe	Base