

TRU-CORE™ MC 110C-K4
AWS E110C-K4 H4



PRODUCT DESCRIPTION:

Tru-Core MC 110C-K4 is a low alloy steel, metal cored electrode for gas shielded arc welding of low alloy, and carbon steels requiring tensile strengths in excess of 110 ksi and good CVN values at temperatures as low as -60°F. This electrode is intended to be used with shielding gas blends of 75-95% Argon/Balance Carbon Dioxide. The MC 110C-K4 can be used in single and multiple pass applications, both in fillets and groove welds.

**Metal Cored, Gas Shielded,
Carbon Steel Electrode**

CLASSIFICATIONS & APPROVALS:

- AWS A5.28: E110C-K4 H4
- ASME SFA 5.28: E110C-K4 H4

PRODUCT FEATURES	
Excellent mechanical properties	Nearly slag free welds
Flat bead geometry	Smooth arc transfer
Easy clean-up	Excellent feedability
Good low-temperature CVN properties	Better sidewall fusion than solid electrodes

TYPICAL APPLICATIONS:

Tru-Core MC 110C-K4 is a good choice to weld steels from ¼" thickness up to heavy plates sections. Typical grades: ASTM A514 Grades, HY-100, and armor plate. Some examples are:

- Crane frames and components
- Mining machinery frames
- Construction equipment frames
- Welding armor to carbon steel and itself

MANUFACTURING ADVANTAGES:

- Patented, state of the art forming, powder feeding, and drawing equipment
- Laser sensors measure strip and powder feed parameters for precise fill percentage
- Extremely low diffusible hydrogen levels

TYPICAL APPLICATION SHIELDING GAS BLEND:

- 75-95% Argon/Balance CO₂
- Flow Rate: 35-45 CFH

WIRE DIAMETERS (in):

.045	.052	.062
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WELDING POSITIONS:




All position welding is possible when using the correct shielding gas blends, welding process and parameters.

	AWS/ASME REQ.	95% Ar / 5% CO ₂
TYPICAL WELD METAL COMPOSITION (WEIGHT %)		
CARBON (C)	0.15 (max.)	0.04
MANGANESE (Mn)	0.75 – 2.25	1.67
SILICON (Si)	0.80 (max.)	0.43
SULPHUR (S)	0.025 (max.)	0.010
PHOSPHORUS (P)	0.025 (max.)	0.008
NICKEL (Ni)	0.50 – 2.50	2.21
MOLYBDENUM (Mo)	0.25 – 0.65	0.46
CHROMIUM (Cr)	0.15-0.65	0.34
VANADIUM (V)	0.03 (max.)	0.00
COPPER (Cu)	0.35 (max.)	0.04
TYPICAL MECHANICAL COMPOSITION		
TENSILE STRENGTH (ksi)	110 (min.)	111.7
YIELD STRENGTH (ksi)	98 (min.)	101
ELONGATION (% IN 2")	15 (min.)	18
CVN @ -60°F (-51°C)	20.0 (min.)	26.7 ft-lbf
TYPICAL DIFFUSIBLE HYDROGEN – AWS A4.3 REQUIREMENTS		
ml /100g	4.0 (max.)	1.78




APPROXIMATE WELDING PARAMETERS: METAL CORED WIRE-FLAT AND HORIZONTAL POSITIONS

DIAMETER (in)	POLARITY	AMPERAGE		VOLTAGE		WIRE FEED SPEED (in/min)		CTWD (in)	SHIELDING GAS
		Min.	Max.	Min.	Max.	Min.	Max.		
.045	DCEP	120	340	17	30	190	520	5/8	75-90% Argon/Balance CO ₂
.052	DCEP	145	360	17	30	175	475	5/8	75-90% Argon/Balance CO ₂
1/16 (.062)	DCEP	190	485	17	30	150	450	3/4 - 1	75-90% Argon/Balance CO ₂
1/16 (.062)	DCEP	345	550	21	31	150	250	1	75-90% Argon/Balance CO ₂

PACKAGES
33-lb. Fiber Spool
50-lb. Fiber Spool
60-lb. Coil
500-lb. Drum Pack
500-lb. Smart Pak™ 
600-lb. Drum Pack
600-lb. Smart Pak™ 
600-lb. Wood Reel
600-lb. Tru-Trac® 

Note: See "Premium Packaging Options" for full description of packages. For additional packages, please contact NS Customer Service at 1-800-777-1618.

 Exclusive to NS customers.

DISCLAIMER:

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