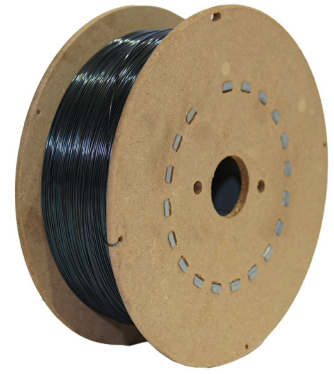


Tru-Core® MC 80C-Ni1 Metal-Cored Welding Wire

AWS E80C-Ni1H4



Tru-Core® MC 80C-Ni1 is a low alloy steel, composite metal cored electrode for gas shielded arc welding low alloy, and certain carbon, steels requiring tensile strengths in excess of 80 ksi and good CVN values at temperatures as low as -50°F.

This electrode is intended to be used with a shielding gas blend of 95- 99% Argon/Balance Oxygen but performs well with 75- 95% Argon/Balance Carbon Dioxide as well. It can be used in single and multiple pass applications, both in fillets and groove welds.

100% Made in the U.S.A. with American steel to meet "Buy America" Standards.

Manufacturing Advantages

- Welding steels from ¼" thickness up to heavy plates sections
- Typically used on grades ASTM, A203 Grade A, ASTM A352 Grades LC1 and LC2, and weathering steel such as ASTM A588
- Lower diffusible hydrogen content for reduced risk of hydrogen-induced cracking
- Provides deep penetration for welding thick materials
- Minimal spatter for easier post-weld cleanup
- Higher welding speed for improved productivity

Welding Positions

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

Shielding Gas Blends

- 95-99% Argon/Balance O₂
- 100% CO₂
- Flow rate: 35-45 CFH


Applications

- Agricultural Equipment
- Auto Body
- Automotive Exhaust
- General Fabrication
- Heavy Equipment
- Pressure Vessels
- Shipbuilding
- Structural Steel
- Structures
- Railcars

Specifications

Meets or Exceeds:

- AWS A5.28: E80C-Ni1 H4
- ASME SFA-A5.28: E80C-Ni1 H4

 Made in America

Storage

Welding wire should be stored in a dry, enclosed environment and in its originally sealed package

Tru-Core[®] MC 80C-Ni1 Metal-Cored Welding Wire

AWS E80C-Ni1 H4

Typical Weld Metal Composition (as required per AWS)

	C	Mn	Si	P	S	Cu	Ni	Cr	Mo	V
95% Ar/5% O ₂	0.04	1.48	0.43	0.008	0.009	0.05	0.9		0.14	0
75% Ar/25% CO ₂	0.04	1.41	0.4	0.008	0.009	0.05	0.94		0.14	0
AWS/ASME	0.12 (max.)	1.50 (max.)	0.90 (max.)	0.025 (max.)	0.030 (max.)	0.35 (max.)	0.80-1.10		0.30 (max.)	0.03 (max.)

Typical Mechanical Properties (as welded)

	TENSILE STRENGTH KSI	YIELD STRENGTH KSI	ELONGATION (% IN 2")	CVN @ -20° F (-29°C)
95% Ar/5% O ₂	86	73.8	29	38.3 ft-lbf
75% Ar/25% CO ₂	83.2	70.7	32	35.7 ft-lbf
AWS/ASME	80 (min.)	68 (min.)	24 (min.)	20 (min.)

Typical Diffusible Hydrogen (ml/100g)

95% Ar/5% O ₂	1.6
75% Ar/25% CO ₂	1.1
AWS/ASME	4.0 (max.)



3602 North Perkins Road
Stillwater, OK 74075
Customer Service: 1-800-777-1618
www.NSARC.com