

MIDALLOY MASTERCOR® E90C-B3 Metal-CORED WIRE

CLASSIFICATION

- AWS 5.28 Class E90C-B3 / ASME SFA 5.28 Class E90C-B3

DESCRIPTION

- MIDALLOY Mastercor E90C-B3 metal-cored wire is a flat and horizontal metal -cored wire, particularly suited for general fabrication of plate, header connections and for pipe welding.
- Midalloy Mastercor E90C-B3 can be used for single or multiple pass welding.
- Midalloy Mastercor E90C-B3 is a composite metal-cored wire that requires external gas shielding.
- Midalloy Mastercor E90C-B3 produces less spatter than ER90S-B3 and has better arc characteristics.
- Midalloy Mastercor E90C-B3 eliminates the possibility of slag exclusions when compared to flux-cored wire.

APPLICATION

- For welding applications which join low alloy steels to the 2¼ Cr – 1 Mo, and other similar Cr-Moly alloys.
- A Post weld heat treatment is normally recommended for most applications.
- Common materials include ASTM A387 Grade D, (cast) A217.

TYPICAL CHEMISTRY (RESULTS WITH 75%Ar 25%CO₂ or 98%Ar-2%O₂ SHIELDING GAS)

C	Mn	Si	P	Ni	S	Cr	Mo	V	Cu
0.07	0.91	0.40	0.010	0.04	0.010	2.24	1.09	0.01	0.04

TYPICAL MECHANICAL PROPERTIES STRESS RELIEVED 1 HOUR @1275°F
 75%Ar - 25%CO₂ 98%Ar-2% O₂

YIELD STRENGTH	78,300 PSI	78,900 PSI
TENSILE STRENGTH	93,400 PSI	96,600 PSI
% ELONGATION IN 2"	22%	21.2 %

WELDING PARAMETERS

- Parameters are for 75% Ar-25%CO₂ shielding gas. For 98%Ar-2%O₂ reduce voltage by 3-4 volts

SIZE	VOLTS	TYPICAL AMPS	Wire feed speed	POLARITY	STICK OUT	GAS FLOW
.045	27-33	150-300	200-550	DCRP	½-1 INCH	30-40 SCFH

STANDARD PACKAGING

- 33 lb. spool®

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