

MIDALLOY ER80S-D2 Bare WELDING WIRE

CLASSIFICATION

- AWS 5.28 Class ER80S-D2 / ASME SFA 5.28 Class ER80S-D2

DESCRIPTION

- MIDALLOY ER80S-D2 welding wire is a bare wire, used for GMAW and GTAW welding.

APPLICATION

- MIDALLOY ER80S-D2 welding wire is designed for the gas metal arc welding and gas tungsten arc welding when moderately high strength and good sub-zero toughness is needed in the PWHT condition.
- Preheating and interpass temperatures of not less than 300°F must be used during welding.

TYPICAL CHEMISTRY

C	Mn	Si	Cr	Mo	P	S	Cu
.09	1.75	.70	.05	.47	.010	.012	.15

TYPICAL MECHANICAL PROPERTIES

TENSILE STRENGTH	84,000 PSI
YIELD STRENGTH	71,500 PSI
ELONGATION	19%
IMPACT STRENGTH @ -20°F	35 ft. lbs.

Note: Mechanical Properties of welds are greatly influenced by preheat inter-pass temperature, heat input, and PWHT.

RECOMMENDED WELDING PARAMETERS

PROCESS	DIA. OF WIRE	AMPERAGE	VOLTAGE	GAS/FLUX
GTAW (TIG)	1/16"	50-120	7-13	Ar
	3/32"	120-200	10-16	Ar
	1/8"	150-220	12-18	Ar
GMAW (MIG) SHORT ARC	.035"	90-160	14-20	CO ₂
	.045"	120-200	16-20	CO ₂ or 75 Ar / 25 CO ₂
	1/16"	-	-	CO ₂ or 75 Ar / 25 CO ₂
GMAW (MIG) SPRAY TRANSFER	.035"	180-230	25-28	98 Ar / 2 O ₂
	.045"	250-350	25-30	75 Ar / 25 CO ₂
	1/16"	280-400	26-36	75 Ar / 25 CO ₂

STANDARD PACKAGE

- TIG 50 lb. carton
- MIG 33 lb. spool

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