

MIDALLOY ER80S-Ni 2 WELDING WIRE

CLASSIFICATION

- AWS A5.28 Class ER80S-Ni2 / ASME SFA 5.28 Class ER80S-Ni2 (UNS K21240) and EN10204

DESCRIPTION

- MIDALLOY ER80S-Ni2 is a copper-coated wire, used for GMAW and GTAW welding.
- ASME Section IX F#6 A#10

APPLICATION

- MIDALLOY ER80S-Ni2 welding wire is used for Tig root passes or Tig & Mig joining for low-temperature, fine-grained steels. These alloys have higher strength and require good toughness at temperatures as low as -60°F.

TYPICAL CHEMISTRY

C	Mn	Si	P	S	Ni	Cr	Mo	V	Cu
.11	1.02	.58	.012	.010	2.35	.04	.01	.002	.14

TYPICAL MECHANICAL PROPERTIES AS WELDED

TENSILE STRENGTH	88,000 PSI (620 KPA)
YIELD STRENGTH	71,950 PSI (510 KPA)
ELONGATION IN 2"	25%
CHARGE IMPACT @ -60°C	38 ft. lbs. Average 50 joules

RECOMMENDED WELDING PARAMETERS

PROCESS	DIA. OF WIRE	AMPERAGE	VOLTAGE	GAS/FLUX
GTAW	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 PACKAGING

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

6/4/10

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