

## MIDALLOY ER309LMo BARE WIRE

### CLASSIFICATION

- Non AWS Close to Class in AWS 5.9 ER309LMo except Cr is lower and Ni is higher
- EN ISO 14343 S 23 12 2L

### DESCRIPTION

- MIDALLOY ER309LMo is an all-purpose stainless wire.
- Carbon content value is controlled to be less than 0.03%
- Cr content 21 to 22%, Ni content 15%
- Ferrite 8FN Average

### APPLICATION

- For overlay welding of carbon steel to get a type 316 deposit.
- Dissimilar metal welding of carbon and low alloy steels to stainless steel and duplex stainless steels.

### TYPICAL CHEMISTRY

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.02	22.0	15.0	2.5	1.30	0.40	0.015	0.005	0.08

### TYPICAL MECHANICAL PROPERTIES

TENSILE STRENGTH	90,900 PSI
ELONGATION IN 2"	35%
HEAT TREATMENT	NONE

### RECOMMENDED WELDING PARAMETERS

PROCESS	DIAMETER	VOLTAGE	AMPERAGE	GAS/FLUX*
TIG (GTAW)	1/16"	14-18	90-130	100% Ar
	3/32"	15-20	120-175	100% Ar
	1/8"	15-20	150-220	100% Ar
MIG (GMAW)	.035" SHORT ARC	16-26	70-160	69%Ar-30%He-1%O <sub>2</sub>
	.035" SPRAY ARC	26-31	150-230	92%Ar-8%Co <sub>2</sub> or
	.045" SPRAY ARC	28-32	180-280	98%Ar-2%O <sub>2</sub>
SUB ARC (SAW)	3/32"	28-30	275-350	Record IN or
	1/8"	29-32	350-450	Record IND 24

### STANDARD PACKAGING

- TIG 10 lb. tube / 60 lb. carton
- MIG 30 lb. spool
- SAW 60 lb. coil

3/2/17

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