

MIDALLOY ER316L BARE WIRE

CLASSIFICATION

- AWS 5.9 Class ER316L/ASME SFA 5.9 Class ER316L
- UNS# S31683 A#8 F#6

DESCRIPTION

- Midalloy ER316L stainless steel wire is used for GMAW, GTAW, and SAW welding.

APPLICATIONS

- Midalloy ER316L stainless steel wire is a general purpose wire used for joining molybdenum bearing 316L type stainless steels in both wrought and cast forms. Because of the molybdenum, this product has increased creep resistance at elevated temperatures, as well as pitting resistance in marine and industrial environments. This product has many applications in the chemical process industry.
- Low carbon content (.03% max) reduces the possibility of inter-granular corrosion.

TYPICAL CHEMISTRY

C	Mn	Si	Cr	Ni	Mo	S	P	N	Cu
.015	1.85	.48	18.5	12.0	2.50	.009	.015	.05	.05

TYPICAL MECHANICAL PROPERTIES

TENSILE STRENGTH	87,000 PSI
YIELD STRENGTH	58,000 PSI
ELONGATION IN 2"	36%

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 ₂
	.035" SPRAY ARC	26-31	150-230	92%Ar-8%Co ₂ or
	.045" SPRAY ARC	28-32	180-280	98%Ar-2%O ₂
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/1200 lb. pallet
- SUB ARC 60 lb. coil/1440 lb. pallet

10/16/09

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