# MIDALLOY ER100S-1 WELDING WIRE

### **CLASSIFICATION**

AWS 5.28Class ER100S-1 / ASME SFA 5.28 Class ER100S-1

#### **DESCRIPTION**

MIDALLOY ER100S-1 is a low alloy, bare welding wire suited for MIG or TIG welding.

### **APPLICATIONS**

- MIDALLOY ER100S-1 is used to weld HY80 and other similar steels.
- Welds exhibit high strength as well as low temperature toughness down to -60°F.

#### TYPICAL CHEMISTRY

С	Mn	Si	Р	S	Ni	Cr	Мо	٧	Ti	Zr	Al	Cu
.06	1.4	.45	.005	.005	1.7	.2	.3	.04	.01	.01	.01	.15

### **TYPICAL MECHANICAL PROPERTIES**

TENSILE STRENGTH	104,000 PSI
YIELD STRENGTH	92,000 PSI
ELONGATION IN 2"	17%
CHARPY V NOTCH @ -60°F	60 ft. lbs.

## **WELDING PARAMETERS (GMAW)**

		SPRAY TR	ANSFER	SHORT ARC			
DIA.	AMPS.	VOLTS	GAS	AMPS.	VOLTS	GAS	
.035"	160-200	28 – 32	98 Ar/2 O <sub>2</sub>	100-140	22 - 25	100% CO <sub>2</sub>	
.045"	180-220	30 - 34	75 Ar/25 CO <sub>2</sub>	120-150	23 - 26	75 Ar/25 CO <sub>2</sub>	

### **OTHER INFORMATION**

 Mechanical properties are greatly influenced by preheat, interpass temperature, and post weld heat treatment.

#### STANDARD PACKAGING

- 33 lb. Spool
- 50 lb. bulk box

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