

MIDALLOY ER320LR BARE WIRE

CLASSIFICATION

- AWS 5.9 Class ER320LR / ASME SFA 5.9 Class ER320LR

DESCRIPTION

- MIDALLOY ER320LR stainless steel wire is used for GMAW and GTAW of Alloy 20 (UNS N08020). The following specifications cover Stainless Steel Alloy 20:
AISI 664, ASTM B366, ASTM B462, ASTM B463, ASTM B464, ASTM B468, ASTM B471, ASTM B473, ASTM B474, ASTM B475, ASTM B729, DIN 2.4660, UNS N08020

APPLICATIONS

- MIDALLOY ER320LR is used to weld metals with similar composition; such as 20 CB-3, in wrought and cast forms. This product is vacuum melted to reduce levels of carbon, phosphorus, and sulfur to reduce microfissuring. Columbium and manganese are also controlled to a tighter specification for this purpose.

TYPICAL CHEMISTRY

C	Si	Cb	Mn	P	Ta
.015	.070	.22	1.85	.010	.009
Cr	S	V	Mo	Cu	Ni
20.02	.002	.039	2.41	3.50	32.92

TYPICAL MECHANICAL PROPERTIES

TENSILE STRENGTH	75,000 PSI Minimum
YIELD STRENGTH	57,500 PSI
ELONGATION IN 2"	35%

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	26-29	150-180	99% Ar + 1% O ₂
	.045" SPRAY ARC	28-32	180-250	or
	1/16" SPRAY ARC	29-33	200-300	97% Ar + 3% CO ₂

PACKAGING

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

5/1/20

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