

MIDALLOY ERNiCrFe-11 (601) BARE WIRE

CLASSIFICATION

- ASME SFA 5.14 / AWS 5.14 Classification ERNiCrFe-11. UNS N06601 ASME Section IX F No. 43

DESCRIPTION

- MIDALLOY ERNiCrFe-11 is a Nickel-Chromium-Iron alloy bare wire used for the GTAW of Alloy 601.
- MIDALLOY ERNiCrFe-11 is used for applications for high temperature (over 2,100°F) nickel based alloys and has excellent weldability.
- Under certain conditions GMAW may be used.

APPLICATIONS

- MIDALLOY ERNiCrFe-11 nickel alloy bare wire is used for GTAW joining and GMAW.
- MIDALLOY ERNiCrFe-11 can be used to weld all forms of UNS N06601 (ASTM B-166,167, and 168).
- MIDALLOY ERNiCrFe-11 can also be used for applications in oxidation, hydrogen sulfide, and sulfur dioxide.
- Preheating is not normally needed.

TYPICAL CHEMISTRY

C	Mn	Si	Fe	Ni + Co	Cr	Al	Cu	P	S
0.08	0.85	.15	balance	61	23.3	1.4	.45	0.015	0.01

TYPICAL MECHANICAL PROPERTIES ALL WELD METAL

TENSILE STRENGTH	94,500 PSI
ELONGATION	40%

RECOMMENDED WELDING PARAMETERS

BASE METAL THICKNESS IN.	TUNGSTEN ELECTRODE DIA. IN.	FILLER WIRE DIA. IN.	AMPERAGE DCSP	VOLTAGE	GTAW SHIELDING GAS
.030 to 1/16	1/16	1/16	35-60	9-12	100% Argon
1/16 to 1/8	1/16 to 3/32	1/16 or 3/32	50-95	9-12	
1/8 to 1/4	3/32 or 1/8	3/32 or 1/8	75-150	10-13	
1/4 and up	3/32 or 1/8	3/32 or 1/8	95-200	10-13	

BASE METAL THICKNESS IN.	MODE OF TRANSFER	FILLER WIRE DIA. IN.	AMPERAGE DCRP	VOLTAGE	GMAW SHIELDING GAS
1/8 to 1/4	Short Arc	.035	70-90	17-20	90%He7.5Ar2.5CO2 or 100%Ar or 75%Ar25%He or 100% Ar Ar He CO2 or 100%Ar
1/4 and up	Spray	.045	75-160	19-22	
		.035	150-190	26-29	
		.045	170-225	28-32	
	Pulse	.045	120-150	18-20	

STANDARD PACKAGING

- GTAW: 10 Lb. Tube / 60 lb. Carton
- GMAW: 30 Lb Spools

2/5/21

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