



exocor™

Nickel BARE WIRE DATA SHEET

executive 82

DESCRIPTION

Executive 82 is a nickel-chromium-iron alloy used for TIG, MIG, and SAW welding and used in the welding of ASTM B163, B166, B167, and B168 having UNS Number N0660.

Executive 82 is an excellent choice for joining dissimilar alloys, ie nickel to stainless, stainless to carbon steels, Inconel® 600,601,690, alloy 800, 800HT; other Inconel and Incoloy® alloys to carbon steel and stainless steel. Executive 82 can also be used to join nickel and Monel® alloys, and Monel alloys to carbon steel. Executive 82 maintains strength and resists corrosion and oxidation up to 900°F. It is an excellent alternative to filler metal 330 stainless in joining applications. Use Executive 72/20/3 for all position FCAW applications.

TYPICAL CHEMICAL VALUES

C	Mn	Fe	P	S	Si	Ni	Cr	Cu	Ti	Nb+Ta	TOE
0.03	2.85	1.1	0.003	0.001	0.22	72.9	20.4	0.50	0.75	2.5	0.50

WELDING PARAMETERS

PROCESS	SIZE	VOLTS	AMPS	SPEED OF WELDING / GAS FLOW	SHIELDING GAS / FLUX
SAW	.062	26 - 29	250 - 320	20 - 30 IPM	Record NiCrW
	.093	28 - 31	300 - 350	20 - 30 IPM	Record NiCrW
	.125	29 - 32	350 - 450	20 - 30 IPM	Record NiCrW
GMAW	.035	29 - 33	160 - 180	30 - 50 CFH	75% Argon+25% Helium
	.045	29 - 33	180 - 220	30 - 50 CFH	or
	.062	29 - 33	210 - 250	30 - 50 CFH	50% Argon + 50% Helium
GTAW	.093	15 - 20	120 - 175	30 - 40 CFH	100% Argon

MECHANICAL PROPERTIES

Tensile Strength:	86,000 PSI	590 MPA
Yield Strength:	52,000 PSI	360 MPA
Elongation:	38%	
Impact Strength at -196°C:	55 ft lbs	
Lateral Expansion:	42 Mills	

CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to **AWS/SFA 5.14, Class ERNiCr-3**, ISO 18274, Class SNi 6082.

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