



DESCRIPTION

Executive 617 is a nickel-chromium-cobalt-molybdenum alloy with an exceptional combination of high-temperature strength and oxidation resistance. Executive 617 is used for GTAW, GMAW, and SAW welding of nickel-chromium-cobalt-molybdenum alloys between themselves as well as dissimilar metals such as stainless, carbon or low alloy steels. This alloy is also an excellent choice for the welding of high temperature resistant steels such as 1.4876 and NiCr23Cu12Mo – NiCrMo alloys.

This filler wire also can be used for overlay welding where similar chemical composition is desired. The weld metal provides optimum strength and oxidation resistance from 1,500°F (815°C) up to 2,100°F (1,150°C).

TYPICAL CHEMICAL VALUES

C	Mn	Fe	P	S	Si	Cu	Ni	Al	Ti	Cr	Mo	Co
0.05-0.15	1.0	3.0	0.03	0.015	1.0	0.50	Rem	0.8-1.5	0.60	20.0-24.0	8.0-10.0	10.0-15.0

*single values shown are maximum percentages

WELDING PARAMETERS

PROCESS	SIZE	VOLTS	AMPS	SPEED OF WELDING / GAS FLOW	SHIELDING GAS / FLUX
SAW	.062	26 - 29	250 - 320	10 - 14 I.P.M	Record NiCrW
	.093	28 - 31	300 - 350	10 - 14 I.P.M	Record NiCrW
	.125	29 - 32	350 - 500	10 - 14 I.P.M	Record NiCrW
GMAW	.035	26 - 29	150 - 190	30 to 50 CFH	75% Argon+25% Helium
	.045	28 - 32	180 - 220	30 to 50 CFH	or
	.062	29 - 33	210 - 250	30 to 50 CFH	50% Argon + 50% Helium
GTAW	.093	15 - 20	120 - 175	30 to 40 CFH	100% Argon

MECHANICAL PROPERTIES

Tensile Strength:	90,000 PSI minimum	620 MPA
Yield Strength:	88,500 PSI	610 MPA
Elongation:	28%	

CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to AWS/SFA 5.14, Class **ERNiCrCoMo-1**, ISO 18274, Class SNi 6617.