



DESCRIPTION

Executive 410NiMo is primarily designed for welding ASTM CA6NM castings or similar material, as well as light-gauge 410, 410S, and 405 base metals. Filler metal of this classification is modified to contain less chromium and more nickel to eliminate ferrite in the microstructure as it has a deleterious effect on mechanical properties. Final postweld heat treatment should not exceed 1150°F [620°C], as higher temperatures may result in rehardening due to untempered martensite in the microstructure after cooling to room temperature.

TYPICAL CHEMICAL VALUES

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.02	12.0	4.5	0.55	0.4	0.4	0.01	0.01	0.75

WELDING PARAMETERS

PROCESS	SIZE	VOLTS	AMPS	SPEED OF WELDING / GAS FLOW	SHIELDING GAS / FLUX
SAW	.093	29 - 32	300 - 350	20 - 30 IPM	Record IN Flux
	.125	29 - 32	400 - 550	20 - 30 IPM	Record IN Flux
	.156	29 - 32	500 - 650	20 - 30 IPM	Record IN Flux
GMAW	.035	29 - 33	160 - 180	30 - 50 CFH	98/99% Ar + 2/1% O ₂
	.045	29 - 33	180 - 220	30 - 50 CFH	or
	.062	29 - 33	210 - 250	30 - 50 CFH	97% Ar + 3% CO ₂
GTAW	.093	Direct Current; Electrode –		30 - 40 CFH	100% Ar

MECHANICAL PROPERTIES

Tensile Strength:	118,500 PSI	820 MPA
Yield Strength:	92,000 PSI	630 MPA
Elongation:	20%	

CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to **AWS/SFA 5.9, Class ER410NiMo**, ISO 14343A, Class 13 4 and ISO 14343B, Class SS410NiMo.