

### DESCRIPTION

Executive 59 is a nickel-chromium-molybdenum alloy designed for welding alloy 59 and other nickel-chromium-molybdenum alloys using TIG, MIG and SAW welding processes. The high alloy content of Executive 59 produces high strength weld material with excellent wet corrosion resistance. Executive 59 contains no tungsten and has extra low silicon and carbon so is not prone to grain-boundary precipitation during hot forming and welding.

Executive 59 filler metal is produced using high quality raw materials and tightly controlled chemistry to provide top quality, exceptionally clean wires that deliver the results fabricators demand.

### APPLICATIONS & FEATURES

Executive 59 is used for welding low-carbon nickel-chromium-molybdenum alloys as well as for joining low carbon nickel-chromium-molybdenum alloys to steel and other nickel base alloys.

Typical service includes scrubbers for flue gas desulfurization (FGD) and in petro-chemical plants where aggressive corrosive environments are found.

### TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Mn	Fe	P	S	Si	Cu	Ni	Al	Mo	Cr
0.005	0.30	0.50	0.01	0.003	0.005		59.0	0.20	16.0	23.0

**Tensile Strength:** 110,000 PSI Min      **Yield Strength:**      **Elongation:** 45%

### TYPICAL WELDING PARAMETERS

Process	Diameter	Voltage	Amperage	Gas Flow	Shielding Gas / Flux	
<b>GMAW</b> - Short	.035"	17-20	70-90	30 to 50 CFH	100% Ar	
	.045"	19-22	75-160		75% Ar / 25% He	
	- Spray	.045"	30-32		190-250	90% He / 7.5% Ar / 2.5% CO <sub>2</sub>
	- Pulse	.045"	18-20		120-150	
<b>GTAW</b>	.093"	Direct Current; Electrode -		30 to 40 CFH	100% Ar	
<b>SAW</b>	.062"	28-32	250-280		NiCr-W Flux	
	.093"	28-33	275-350			
	.125"	29-34	350-450			

### STANDARD PACKAGING

<b>GMAW</b> (MIG)	33-lb wire baskets	500-lb Drum
<b>GTAW</b> (TIG)	10-lb plastic tube	40-lb box
<b>SAW</b>	60-lb wire coil	
	60-lb Acro Pak	

### CLASSIFICATION

AWS/SFA 5.14, Class **ERNiCrMo-13**

