

### DESCRIPTION

Executive 686 is a nickel-chromium-molybdenum alloy designed for welding alloys 625, C-276 along with duplex, super duplex and super austenitic stainless steels using TIG, MIG and SAW welding processes. This alloy is also used for weld overlay on parts subject to acid and acid chloride environments. The high alloy content of Executive 686 produces high strength weld material with excellent corrosion resistance, particularly pitting and crevice type corrosion.

Executive 686 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 686 Filler Metal is used for welding duplex, super-duplex and super-austenitic stainless steels as well as alloys 22,59, 625, C-276 and 686.

Executive 686 can be used for weld overlay where general corrosion resistance is required including service environments containing hydrochloric or sulfuric acid along with oxidizing chloride and saline solutions.

### TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Mn	Fe	P	S	Si	Cu	Ni	Mo	Ti	Cr
0.01	1.00	5.00	0.02	0.02	0.08	0.50	Bal	15.0	0.25	19.0

**Tensile Strength:** 110,000 PSI Min      **Yield Strength:**      **Elongation:** 35%

### 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
- 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-14**