

### DESCRIPTION

Executive 218 is most often used to weld UNS S21800 and Nitronic® 60 base metals. This alloy is a nitrogen strengthened austenitic stainless steel exhibiting high strength and good toughness over a wide range of temperature environments.

Nitrogen alloying in this base composition results in significant improvement in wear resistance in particle-to-metal and metal-to-metal (galling) applications when compared to the more conventional austenitic stainless steels such as Type 304.

### APPLICATIONS & FEATURES

The Executive 218 filler metal has sufficient total alloy content for use in welding dissimilar alloys like mild steel and the stainless steels, and for direct overlay on mild steel for corrosion and wear applications when used with the GMAW process.

### TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.084	16.38	8.88	0.28	8.12	4.10	0.022	0.001	0.43

<b>Tensile Strength:</b>	121,000 PSI min	<b>Yield Strength:</b>	84,000 PSI min	<b>Elongation:</b>	19%
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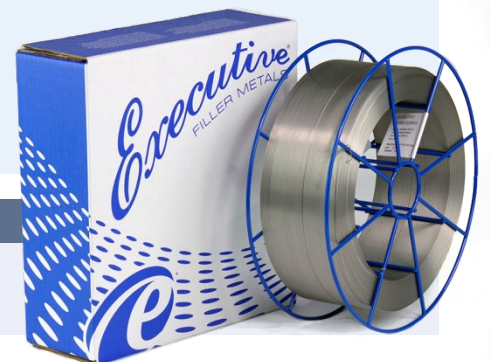
### TYPICAL WELDING PARAMETERS

Process	Diameter	Voltage	Amperage	Gas Flow	Shielding Gas / Flux
<b>GMAW</b> - Short  - Spray	.035"	21-22	160-200	30 to 50 CFH	90% He/7.5% Ar/2.5% CO <sub>2</sub> or 1%-5% O <sub>2</sub> /Balance Ar
	.045"	22-23	180-210		
	.062"	23-24	200-220		
	.035"	23-25	190-260		
	.045"	25-28	250-330		
	.062"	28-31	310-350		
<b>GTAW</b>	.093" & .125"	Direct Current; Electrode -		30 to 40 CFH	100% Ar
<b>SAW</b>	.093"	29-32	300-350		Record IND 24 or Record IN
	.125"	29-32	400-550		

### STANDARD PACKAGING

**GMAW (MIG)** 33-lb wire spools

**GTAW (TIG)** 10-lb plastic tube 40-lb box



### CLASSIFICATION

AWS/SFA 5.9, Class **ER218**