

#### DESCRIPTION

Executive 307Si is an austenitic stainless steel wire with extremely low ferrite.

This alloy is basically a modified 307 with higher manganese to improve hot cracking resistance.

The high silicon content provides very good wettability, which ensures a smooth spatter free weld deposit.

#### APPLICATIONS & FEATURES

This alloy is a good choice for welding thick plates such as armor plate, manganese steel and wear plates. It is also a very good choice for welding of dissimilar metals like carbon steel to stainless steel, where a PWHT is required. The resulting weld deposit possesses corrosion resistance up to 1,500°F.

Executive 307Si is also a good option as a buttering first pass layer for many hard facing alloys.

#### TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Cr	Ni	Mn	P	Si	S	Mo	Cu	
0.10	21.0	9.0	8.0	0.02	0.80	0.01	0.5	0.05	
<b>Tensile Strength:</b>		93,000 PSI min		<b>Yield Strength:</b>		65,000 PSI min		<b>Elongation:</b> 41%	

#### TYPICAL WELDING PARAMETERS

Process	Diameter	Voltage	Amperage	Gas Flow	Shielding Gas / Flux	
<b>GMAW</b> - Short	.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			
	- Spray	.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

<b>GMAW</b> (MIG)	33-lb wire baskets	1,980-lb pallet
	11-lb plastic spools	11-lb box
	2-lb plastic spools	8-lb box
<b>GTAW</b> (TIG)	10-lb plastic tube	40-lb box
<b>SAW</b>	60-lb wire coil	1,200-lb pallet



#### CLASSIFICATION

AWS/SFA 5.9, Class **ER307**  
EN ISO 14343-A, G 18 8 Mn