

### DESCRIPTION

Executive 55 is used for welding gray, ductile, malleable and Ni-resist cast iron components to themselves, or to low alloy and carbon steels. The weld metal is harder than Executive 99 (ERNi-CI), but it can be machined by using carbide tipped tools.

A preheat and inter-pass temperature of not less than 350°F (175°C) minimum is required to prevent the welds and heat affected zones (HAZ) from cracking. Executive 55 can be used in all positions.

### APPLICATIONS & FEATURES

Executive 55 is especially suited for welding heavy sections such as motor blocks, housings, machine parts, frames, defective castings and building-up worn sections.

Weld deposits are machinable and the deposit color will approximate that of cast iron.

### TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Mn	Si	Ni	P	S	Cu	Fe
0.05	0.5 – 1.5	0.20	55.0	<0.01	<0.01	<0.01	Bal

<b>Tensile Strength:</b>	89,500 PSI	<b>Yield Strength:</b>	36,000 PSI Min	<b>Elongation:</b>	35%
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### 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	
<b>GTAW</b> (TIG)	10-lb plastic tube	40-lb box
<b>SAW</b>	60-lb wire coil	
	60-lb Acro Pak	

### CLASSIFICATION

There is currently no AWS classification for Executive 55

