

# POSTLE INDUSTRIES, INC.



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## Data Sheet

# POSTALLOY® 505-SPL

### Description

POSTALLOY 505-SPL is a special high strength nickel iron, metal-cored, gas-shielded welding wire designed for joining all grades of cast iron, such as gray, ductile, malleable, nodular and Ni-resist. Also for joining cast iron to steel.

### Weld Deposit Properties:

Tensile Strength .....70,000 psi  
Hardness .....190BHN  
Machinable with carbide tools

### Welding Parameters - Use DC Reverse Polarity

Gas Coverage: Use Argon/CO<sub>2</sub> (75/25), 100% Argon, or 100% CO<sub>2</sub> with a flow rate of 45 - 50 cfh. These gases provide similar weldment properties. High Argon mixtures produce good wetting with medium penetration, while 100% Argon produces better wetting with less penetration. 100% CO<sub>2</sub> will result in increased penetration.

Typical volts and amps:

.045" - 20 to 23 volts and 150 to 180 amps. - 5/8" stick-out

POSTALLOY 505-SPL should be applied in stringer beads with only a slight side to side oscillating motion. All craters should be back-filled. Optimum bead contour is slightly convex. Peening will help to relieve stresses.

Preheating: In general preheating is not required, but it may be helpful when welding heavy sections or highly restrained joints. Suggested preheat temperatures are as follows:

Gray, nodular and ductile: 400° - 500°F (200° - 260°C)

Ni-resist and other alloyed types: 800° - 1000°F (425° - 540°C)

### Packaging

Diameter	.045"(1.2mm)
5 Lb. Spools	Standard
25 Lb. Coils	Standard