

POSTLE INDUSTRIES, INC.

P.O. Box 42037 • Cleveland, Ohio 44142

Fax: 216-265-9030 • Phone: 216-265-9000 • Toll Free: 800-321-2978

E-Mail: sparky@postle.com • Web Site: www.postle.com



Data Sheet

POSTALLOY® 50-SPL

Description

POSTALLOY 50-SPL is a special high strength nickel iron, gas-shielded solid wire welding alloy designed for joining all grades of cast iron, such as gray, ductile, malleable, nodular and Ni-resist. Also for joining cast iron to steel.

The alloy components of **POSTALLOY 50-SPL** produce weld deposits with similar solidification and thermal contraction rates as cast iron. This minimizes residual stress build-up.

Weld Deposit Properties:

Tensile Strength 100,000 psi
Hardness 250BHN
Machinable with carbide tools

Welding Parameters: Use DC Reverse Polarity.

Gas Coverage: Use Argon/Oxygen(98/2), Argon/CO₂(75/25), or 100% CO₂ with a flow rate of 45 - 50 cfh. All three gases provide similar weldment properties. The Argon mixtures produce good wetting while 100% CO₂ produces deep penetration.

Typical volts and amps:

.045" - 18 to 30 volts and 150 to 250 amps - 5/8" stick-out

Postalloy 50-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
30 lb Spools	Standard