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HIGH STRENGTH. Postalloy® 50-SPL is a special high strength nickel iron, gas-shielded solid wire welding alloy designed for joining cast irons to themselves and to other materials, for repairing worn or broken parts, and for salvaging defective castings where highest mechanical strength and ductility are required. Use to weld ductile, malleable and gray cast iron, as well as cast iron to carbon 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. Use with semi-automatic and fully automatic and robotic welding operations. stress buildup.

Specifications

Product Type

Wire: Solid-cored, Gas-shielded
Electrode equivalent: Postalloy® 50

Weld Deposit Properties

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

Applications

Where High Strength cast iron repair is needed.

Postalloy® 50-SPL Welding Parameters

Current: DC Electrode Positive

Diameter	Amps	Volts	Stick Out
.045" (1.1mm)	150-250	18-30	5/8" (15mm)

Welding Procedure

Gas Coverage: Use Argon/Oxygen(98/2), Argon/CO (75/25), or 100% CO with a flow rate of 45-50 cfm. All three gases provide similar weldment properties. The Argon mixtures produce good wetting while 100% CO produces deep penetration. 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(204-260°C) Ni-resist and other alloyed types: 800-1000°F(427-538°C)

Packaging Options

Diameter	Standard Packaging
.045" (1.1mm)	5 lb spool, 30 lb spool

