

# POSTLE INDUSTRIES, INC.

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**POSTALLOY 2501-SPL**  
**POSTALLOY 2506-SPL**  
**POSTALLOY 2512-SPL**  
**POSTALLOY 2521-SPL**  
**POSTALLOY 2540-SPL**

## **METAL - CORED, GAS - SHIELDED COBALT BASE HARDFACING ALLOYS**

**Postalloy 2501-SPL:** Conforms to AWS CoCr-C. A high hardness cobalt base alloy with outstanding resistance to abrasion, oxidation, erosion and corrosion. Deposits are harder than 2506-SPL and 2512-SPL, and is especially recommended for metal-to-metal wear. Deposits are highly resistant to galling, retain their high hardness at red heat, and recover full hardness after exposure to temperatures as high as 1500°F(816°C) The higher hardness also means a greater tendency to relief check upon cooling. Deposits are non-machinable.

**Hardness ( 2 layers ): 48 - 53 Rc**

**Postalloy 2506-SPL:** Conforms to AWS CoCr-A. Cobalt base alloy with excellent resistance to mechanical wear and corrosion over a wide temperature range. It retains an effective hardness even up to 1500°F(816°C). Offers outstanding self-mating, anti-galling properties and it is effective when abrasion is accompanied by thermal shock or impact. Deposits are machinable. Crack-free deposits can be made with proper preheat, postheat and interpass temperature.

**Hardness ( 2 layers ): 40 - 45 Rc**

**Postalloy 2512-SPL:** Conforms to AWS CoCr-B. Slightly harder and more wear resistant than 2506-SPL, but its impact resistance is somewhat lower. Also tougher to machine. Weld deposits also have a greater tendency to relief check if welding procedures are not closely monitored.

**Hardness ( 2 layers ): 43 - 46 Rc**

**Postalloy 2521-SPL:** Cobalt base alloy offering good strength and toughness at elevated temperatures. It resists oxidizing and reducing atmospheres up to 2100°F(1149°C). Postalloy 2521-SPL also provides excellent resistance to corrosive environments, and outstanding resistance to cavitation and thermal shock. Deposits have very little tendency to relief check and are fully machinable.

**Hardness ( 2 layers ): 20 - 25 Rc. Work-hardens up to 45 Rc.**

**Postalloy 2540-SPL:** High hardness cobalt overlay. Deposits offer an excellent combination of abrasion and corrosion resistance.

**Hardness ( 2 layers ): 50 - 54 Rc**

### **WELDING PARAMETERS: Use DC Reverse Polarity**

These wires operate over a wide range of settings and can be used in short-arc and spray transfer. For short-arc welding, use 16 - 24 volts, 80 - 225 amps. CO<sub>2</sub> gives the best control, but the most dilution and lowest hardness on first pass. Argon/CO<sub>2</sub>(75/25) gives good control, a better bead appearance and higher first pass hardness. For spray-arc, use 26 - 31 volts, 220 - 300 amps. Argon/Oxygen(98/2) works well. It produces minimal dilution and high first pass hardness. Gas flow rate - 40-45 cfh.

### **SIZES AND AVAILABILITY**

**Postalloy 2501-SPL, 2540-SPL** - 1/16 on 5 and 25 lb Spools

**Postalloy 2506-SPL, 2512-SPL, and 2521-SPL** - .045 and on 5 and 25 lb Sp