**Postalloy® Hardfacing Products for the**

**Cement Industry**

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**Overlay Hardfacing Wires**

**Postalloy® DuraChrome™2820-MCO** is an open-arc or gas shielded chromium carbide alloy for applications involving high impact combined with abrasion. Weld metal is tougher than conventional chromium carbide alloys with fewer stress relieving cracks. Average hardness is 47-52Rc.

**Applications include** Final overlay on crusher jaws, Cone and roll shells, Crusher Parts, Cement crusher rolls.

**Postalloy®DuraChrome™2828T-FCO** **Crack Free Titanium Enriched Hardface Alloy** is fluxed cored, open arc hardfacing wire that deposits a martensitic alloy with high volume of finely dispersed titanium carbides. It has excellent abrasion resistance under low and high stress conditions and retains hardness at high temperatures. Average hardness is 57-60Rc.

**Applications include** Cement crusher rolls, Bucket teeth, Hammers, Mixer panels.

**Postalloy®DuraChrome™2834-MCO** is a specially formulated chromium carbide alloy developed to produce a superior high polish abrasion resistant deposit in service. The tough alloy matrix combination is designed for high abrasion and moderate impact. Heat resistant to 1000°F (538°C). Use on low carbon mild steel, manganese, stainless, and low alloy steels. • Good out of position capabilities • Fast freezing weld deposit • Very good weld bead tie-in • Ideal for dirty surfaces. Average hardness is 54-60RC.

**Applications include** pulverizing hammers, crusher rolls, crusher jaws and cones, augers, bucket lips and teeth, bulldozer blades and tampers.



**Postalloy® DuraChrome™2837-MCO** is specifically designed to produce a high concentration of fine chromium carbides in an austenitic matrix. The fine dispersion of chromium carbides greatly improves the abrasive wear resistance and impact toughness compared to ordinary chromium carbide products. DuraChrome™ 2837-MCO can be applied to carbon steels, low alloy steels, manganese steels and cast-iron rolls. Very consistent crack pattern makes DuraChrome™ 2837-MCO an excellent choice for multi-layer hardface applications. This helps reduce the probability of spalling and chipping. The weld

deposit is not machinable and will withstand hot wear applications up to 1000°F (538°C). Average hardness is 60-66 Rc.

**Applications include** Screw conveyors, Chutes and liner plates, Hammers, Crusher Parts.

**Build-up Hardfacing Wires**

**Postalloy® DuraBuild™2890-FCO** is a tough, build-up welding wire that can be applied to carbon and low alloy steels. Weld deposits are exceptionally sound and dense. Heavy buildups are possible prior to overlaying with a more wear resistant hardfacing alloy. DuraBuild™ 2890-FCO provides a tough machinable deposit. Unlimited layers can be applied with proper procedures, preheat and inter-pass temperatures.

**Applications include** Machine components and gear teeth

**Overlay Hardfacing Electrodes**

**Postalloy® 214** is a high chromium carbide hardfacing electrode for high abrasion and mild impact applications. Deposits take on a high polish, producing excellent frictional and sliding abrasion resistance. Use on carbon and alloy steels, stainless steels and cast iron. Postalloy® 214 is highly resistant to heat and corrosion. Corrosion resistance is equal to straight chromium steels, and it retains its hardness up to 1000°F(538°C). Postalloy® 214 offers good out-of-position welding characteristics on either AC or DC. It offers fast deposition rate and easy slag removal. It produces minimum dilution for high first past hardness and deposits are extremely smooth and virtually ripple free. Average hardness is up to 60Rc.

**Applications include** Augers, chutes and liner plates, shredders & fibrizer hammers

**Postalloy®215HD** is a chromium carbide tubular electrode with extremely good abrasion resistance coupled with mild to moderate impact resistance. Average hardness is 58-62Rc.

**Applications include** Screw conveyors, Chutes and liner plates, Hammers

**Build-up Hardfacing Electrodes**

**Postalloy® 207** is a high alloy, work-hardening austenitic manganese steel hardfacing electrode. It can be used equally well for joining and buildup/surfacing of carbon, low alloy, and manganese steels. Weld deposits made with Postalloy® 207 are a modified chromium-manganese chemistry providing an excellent combination of weld metal strength and ductility. Work-hardens rapidly under repeated impact. The yield strength is higher than ordinary manganese alloys providing greater resistance to mushrooming when subjected to compressive loads and repeated impact. Ideal as a cushioning or buffer layer on manganese steel parts that must be rebuilt on a repetitive basis. Since it will not embrittle until 1000°F (538°C), it will act as an insulator to the manganese base metal in helping it keep below 500°F (260°C) during the welding operation. Hardness as deposited is 20Rc and work hardens to 45-55Rc.

**Applications include** Fabricating manganese steels, Crusher pads, Cones and roll shells, grizzly bars, sizing screens

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**5500 West 164th Street Cleveland, OH 44142 USA Phone: (216) 265-9000 Fax: (216) 265-9030**

**Mike Korba mkorba@postle.com**