**PRESS RELEASE**

Rio-Carb has an ‘Ultrasmooth’ approach to materials handling

*Constant technological innovation has resulted in the successful implementation of Rio-Carb’s Ultrasmooth CrC liner plates at a number of materials handling projects across South Africa.*

**24 April, 2012:** Top liner-plate expert Rio-Carb continues to unearth the numerous advantages of Chromium Carbide-based technology for heavy materials handling applications, with the recent introduction of the company’s revolutionary range of Ultrasmooth liner-plates to the local market.

Rio-Carb director **Colin Maine** points out that the Johannesburg-based company is the exclusive manufacturer and distributor of Chromium Carbide clad (CrC) liner plates, with MaxCSTM, which are specially-designed for heavy materials handling applications in the mining and resources industries. “The revolutionary CrC plates have been proven in laboratory testing to provide up to ten times the wear resistance against abrasion than the industry-standard 400 and 500 BHN steels, which are also susceptible to annealing when heated to 250°C or more.”

Maine notes that the Ultrasmooth variation of CrC technology improves the flowability of materials, in addition to reducing sticky friction, commonly referred to as ‘sticktion’. “Ultrasmooth is a new product where we take our standard line of plate and give it a smooth and mirror-like finish, in order to prevent any sticking and blocking in the chute. This is achieved through a grinding process where the liner is surface-ground with even grinding over the entire surface, including in the valleys and craters. Due to its vertical crystal structure, CrC is also prevents gouging abrasion.”

Using exclusive and patented MaxCS Technology, Maine notes that Rio-Carb is able to take the properties of CrC and cast it via welding process onto a mild steel backing plate, which gives it an optimum hardness of 58 RC, and additional flexibility for moulding and shaping. “Ultrasmooth liner-plates are comprised of 24 per cent chromium and four per cent carbide; thereby, giving the product a wear life that is eight times more than Q and T steels.”

An additional advantage of Ultrasmooth liner-plates is the fact that they contain 50 mm wide weld beads, as opposed to the industry-standard 10 mm stringer beads. “This revolutionary process involves oscillating of the head during the welding process, which creates a 50 mm bead,” Maine continues. “What’s more, during our highly-accurate plasma cutting process, the gaps between the liners, coupled with stud welding, create a uniform smooth surface with few surface indentations.”

Maine highlights the fact that Ultrasmooth is predominantly used in diamond and coal mining applications, and cement manufacturing. “In addition to causing delays and lowering production, blockages can also create substantial damage to conveyor belting. The installation of Ultrasmooth liner-plates in feed chutes ultimately ensures that no blockages occur when the material is being fed from the chute to the conveyor belts and crushers.”

Despite continued challenging economic conditions, Maine is confident that Rio-Carb can gain significant market share in 2012, by showcasing the environmental advantages of Chromium Carbide to the local mining industry.

“Mining operations are becoming more environmentally conscious and are consistently making efforts to shift towards greener equipment, in order to reduce their carbon footprint. Rio-Carb’s entire range of CrC liner plates are environmentally-friendly, due to the extended lifespan of the products. This ultimately results in less wastage and a reduction in energy required when using the equipment. Rio-Carb is at the forefront of environmentally sustainable liner technology in South Africa, and we plan to exploit that advantage throughout 2012,” he concludes.

***Ends***

**Notes to the Editor**There are numerous photographs specific to this press release. Please visit <http://media.ngage.co.za> and click the Rio-Carb link.

**About Rio-Carb**Rio-Carb manufactures wear-resistant Chromium Carbide clad liner plates for heavy materials handling applications in the mining and allied resources industries. The company was initially motivated by Martin Maine, who had experience in the welding and manufacturing industries. He was importing the current product from Australia, and saw the opportunity to establish local manufacture in 1982, when Rio-Tinto had ambitions to establish manufacturing companies allied to mining, and therefore, financed and capitalised the new Rio-Carb for local manufacture. After being in the Rio-Tinto (SA) stable for 16 years, there was a management buy-out by the existing and current share-holders.

**Rio-Carb Contact**

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