New system reduces water consumption in concrete sector

A first-of-its-kind brushable emulsified concrete surface retarder system is being launched nationwide in June 2014 by chemical solutions specialist CHRYSO and Diamond Products - a leading specialist in the manufacture, assembly and sale of diamond tools and equipment for industrial applications.



The eco-friendly CHRYSO/Deco
Brush combination creates an
attractive non-slip concrete surface
with minimal wash out water
released into sewers and storm
water drainage systems, thanks to
a sprayable water based CHRYSO
formulation that slows down the
cement hydration reaction of the
exposed surface of concrete,
thereby eliminating water usage
during the finishing process.



CHRYSO marketing and inland sales manager Hannes Engelbrecht notes that the CHRYSO Deco Brush surface retarder prevents the top layer of the concrete from setting, while allowing the lower layer to set. "Once the concrete has been poured, the CHRYSO retarder is sprayed on the concrete."

After a 24 hour to 48 hour window period, Diamond Products director Brian Clark explains that a Diamatic 435 grinding machine removes the top layer to create a non-slip surface. "The residue created during the brushing process is easily removed by an optional dust extraction system."

The Diamatic 435 WD machine, exclusively distributed locally through Diamond Products, weighs 115 kg with an operational speed of 720 rpm, and a working width of 435 mm in diameter. "Diamaticgrinders are designed for dependability and offer ease of use while providing efficient, cost effective results with low environmental impact," says Clark.

The220 V Diamatic 435 WD model is ideal for use with the CHRYSO/Deco Brush combination, as it boasts a unique balance of power and portability. The machine comes standard with three brushes to ensure an optimal brushed finish. A jockey wheel is included as a value-added extra that eases the handling of the grinder, by maintaining the adequate height to retain the desired pressure of the brushes. This reduces wear, while guaranteeing an even depth and homogeneity of the surface.

According to Clark, the Deco Brush can be used in a variety of applications in numerous industries, ranging from landscaping to concrete flooring.

"The CHRYSO Deco Brush product is ideal for all outdoor concrete flooring applications where a non-slip surface is required, such as driveways and outdoor pathways. For a more appealing finish, coloured concrete can also be used."



Several countries in North America and Europe have restricted the use of water during concrete laying due to its increasing scarcity, and the impact that the runoff can have on the surrounding environment. Other hazards of water use include the residues that are released from the exposed aggregate concrete in urban areas, which can make its way into sewers and water systems.

Clark notes that these factors have led to the proven success of the CHRYSO Deco Brush product on an international level. "The CHRYSO Deco Brush has proven to be highly successful in international markets, and I am confident of similar success on a local level," he concludes.