Concrete wet pressing technology

THE latest concrete wet pressing technology from Wil El Mil Engineering of the UK is distributed in Southern Africa by PMSA.

Developed initially by hydraulic press manufacturer Fielding & Platt, the concrete wet pressing process was established in the 1890s.

It has since become recognised as the process by which the highest-quality concrete paving slabs and kerbs are made.

While the process is well-established in markets such as the UK, it is still relatively new in South Africa, comments Tim Lodge, technical director at Wil El Mil Engineering.

"The main advantage that this process holds for the African market is a dramatic improvement in the quality of the slabs and kerbs that are produced, in addition to greatly reduced labour and floor-space requirements. Significant cement cost-savings make wet pressing a logical choice," confirms Lodge.

Wil El Mil Engineering, via PMSA, already has a footprint in South Africa, with plants up and running in Pretoria, Johannesburg and near Nelspruit. "We have enjoyed a close working relationship with PMSA since 2007.

Through PMSA, we are also looking at expanding further into the African market," Lodge reveals.

The concrete wet pressing process involves compressing a wet concrete slurry under a hydraulic press to remove the excess water. Filters on either side of the concrete ensure that only water is extracted, resulting in a fully-compacted material with a near optimum water/cement ratio.

A vacuum system removes the extracted water, resulting in a product that can be ejected from the mould and stacked for final curing.

Production rates can be up to 120 kerbs/hour and more for slabs. Products typically manufactured by the wet pressing process comply with the most stringent national and international standards.

Due to the superior durability of such products, they are often the standard choice for use in harsh environments, such as where regular freeze/thaw cycles and exposure to de-icing salts are experienced and where sulphate attack is an issue.

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