

# CAPE BRICK'S NEW SCADA SY

Cape Brick recently launched a retaining wall block aimed at builders and supply chain merchants. A special feature of the new VR18 retaining wall block is that it is reversible, with different finishes on either side.



# STEM

The product has been in the planning for a few years, says Anthony Gracie, Managing Director of Cape Brick. He explains that it was a difficult mould to make. Leading manufacturer of concrete block, brick and paving machinery, PMSA, assisted with the mould and recently installed a Supervisory Control and Data Acquisition (SCADA) system at the Philippi facility to serve the mixing and block plants on an integrated platform.

The SCADA system displays visual, animated graphics of machine operation, machine parameter control and data capture. "It has proven to be a tool that we cannot run without, as its advanced and interactive efficiency increases daily manufacture by between 10% and 20%," comments Cape Brick Director Jacques Tresfon.

Another innovative PMSA concrete

solution included the FL Ludwig wall scraper mounted probe. This tool ensures a highly-consistent water dosing in the mixture, which ultimately results in more predictable concrete.

Established in 1938, Cape Brick is the longest-established manufacturer of quality concrete masonry in operation in the Cape. "Our comprehensive product range includes standard masonry products such as all sizes of bricks and blocks, as well as retaining wall blocks and decking blocks," says Gracie. "In October 2009 we introduced our range of wet-cast paving products, featuring over 300 different modules in a wide variety of colours and textures. Cape Brick operates a brick-and-block facility at Philippi and Blackheath and a wet cast operation producing slabs and cobbles. PMSA equipment in operation at Philippi includes a VB4X block

machine, a P1500 mixer and an insulated racking system, among others."

Tresfon adds, "We typically make up to 600 t of product a day in a double shift at Philippi, and 180 t to 200 t in a single shift a day at Blackheath." A unique feature of Cape Brick is the wide scale use of recycled material in its production.

"We have an extensive crushing operation that prepares about 300 t to 400 t of aggregate a day in order to supply our facilities. While it is easy to use 10% to 20% recycled material, once you go beyond 30% to 40%, there is generally a drop in quality." The company developed systems to increase the recycled content by 70%.

Tresfon emphasised the role that PMSA has played in the company's development and the relocation of the plant from Salt River to Philippi. "We basically rebuilt the plant. We retained the VB4X block machine and switched from a P1000 to a P1500 mixer. We fully automated the mixing and installed a new moisture control system, and rebuilt the entire racking system."

Cape Brick is now able to handle 4 200 pallets in the factory, as opposed to 3 000 previously, which continues to give it an edge in the highly competitive and quality-conscious Western Cape market. "We supply the affordable housing market in the region." The investment in the latest technology from PMSA has allowed Cape Brick to focus on its mandate of providing the best quality products. "Our strategy is that quality is non-negotiable, our customer service has to be the best, and our pricing has to be competitive."

The use of recycled aggregates does mean more abrasion and friction on the equipment, but overall the production costs are lower. "In order to be able to incorporate recycled aggregates effectively, you need to have a major crushing network. That by itself is a major investment.

"We are now at the point where these moulds are giving us the lifespan, durability and efficiency that we require. Our relationship with PMSA has been fantastic. They always provide the necessary back-up and support, and are ready to provide a solution for any specific requirements. That has been of immense benefit to us," Gracie concludes. ■

