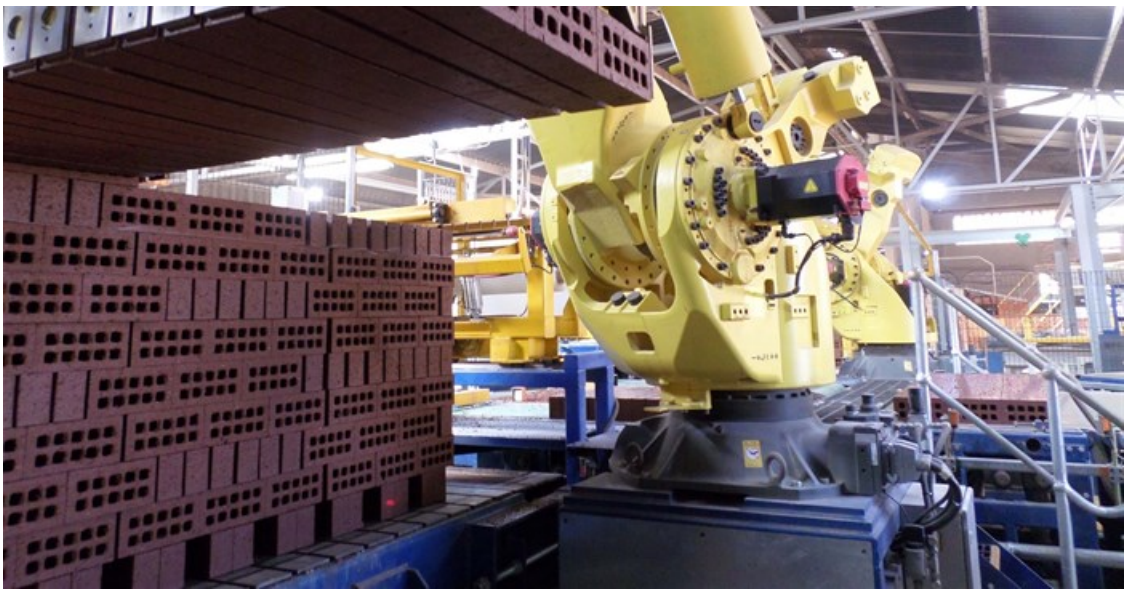
Robotic technology installed at Corobrik Lawley factory

Installed in October last year at its Lawley Factory, Corobrik's new robotic technology is said to provide improved productivity, environmental efficiency, flexibility and enhanced manufacture quality.



“This robotics system had to be specially designed for the Lawley factory because of its distinctive manufacturing specifics, making this one-of-a-kind setting technology in the industry,” explained David Matlou, Corobrik manufacturing director. “By installing this innovative technology, Corobrik will achieve incremental reductions in energy consumption, thereby lowering greenhouse gases, while also giving our customers even better products.”

Energy efficient nature

He said that the improvements made by the robotics serve to build on the clay bricks’ already energy efficient nature. Burnt clay bricks have a very low embodied energy and the new system further decreases energy demand in the production of each brick. Clay brick walls, which are particularly effective in South Africa’s extreme climate, absorb heat during the day and slowly release it during the night thereby delaying heat transfer and reducing the need for artificial climate control.

The robotics will allow flexibility in production as it can run out of Eskom peak tariff hours, lowering the demand on the energy grid.

Further to this, the consistent gaps in the setting pattern achieved by the robotics allow for easy access of heat during the drying and firing processes which optimises the amount of energy required for the brick production.

Improved product quality

Matlou explained that the product quality is significantly improved owing to the precision handling of 'green' products by the robots which eliminates handling damage resulting from manual setting.

“This sophisticated technology minimises defects which means fewer rejects and a better quality, uniform, end product for our customers,” he said.

The engineering team, led by Daniele Torricelli, as well as the factory management team led by Andreas Ntseki, delivered the project on time and within the R22m budget.

The robotics’ highly technical system demands an extremely high level of skill to ensure a smooth operation. To this end, Corobrik selected six existing staff members who then underwent extensive training, allowing them to run the machine.

“Because this is essentially a one-of-a-kind model, we had to ensure the staff operating the system knew it from end-to-end,” said Matlou. “Their training has certainly paid off and the system has been operating successfully from the start.”