Kwa Mhlanga Group realises new potential with Bell and Bomag fleet

Innovative mechanisation methods have brought about increased production and cost savings while maintaining current personnel numbers for a Gauteng-based civil construction group.

A downstream positive effect has shown that this business has, even in tough times, been able to maintain its personnel without anyone being retrenched.

Brothers Francois and Jacques Bakkes landed in civil construction by different roots. From their home in the Southern Free State town of Fauresmith, Jacques went to work in the discipline while Francois first studied at the University of Pretoria.

“In 1997 my brother Jacques brought a longstanding dream to reality when he established a civil engineering company Kwa Mhlanga Construction (Pty) Ltd,” Francois Bakkes tells us. “His aim was to deliver quality civil engineering work within improved lead times and this is the mantra that we still abide by today.”

Francois joined Jacques in the business in 2002.

“Since our early days we’ve concentrated on work emanating from township development, where we would be tasked with laying down services and building roads,” Francois says. “We only work with a few clients but it seems that our attention to detail and bringing projects in or under time and budget, brings us repeat business.”

By 2007 Kwa Mhlanga had grown and diversified into separate construction and plant hire divisions with a quarrying arm following in 2013. “The nature of our business is such that we rely in large parts on yellow machines to get the job done and it was this confidence that saw us establishing a quarrying division in 2013,” Francois adds. “We would be engaged in the load and haul of granite material from the mining face to the primary crusher at a quarry and for this we needed reliable haulage machines. We had researched the market well and are still pleased with our choice of Bell B30E Articulated Dump Trucks (ADTs), which we believe deliver on the lower cost per tonnes in the competitive ADT market.”

Bell Equipment Sales Representative, Chris Botha (left) with Director: Operations of Kwa Mhlanga Group, Francois Bakkes.

Kwa Mhlanga Quarrying owns four Bell B30E ADTs, of which two were acquired in 2014 and another two in 2015.

According to Francois, both he and Jacques stay up-to-date with technological advances in especially Europe and the United Kingdom. This interest lead them to ask Bell Equipment to import a Bomag BMP8500 Compactor, which is operated using a remote control. “We do a lot of trenching and probably made use of 100 tampers at one stage,” Francois says. “Working in deep trenches as our staff sometimes are forced to, we are always aware of possible cave-ins and this remote operated Bomag Compactor allows the operator to stand above the trench out of possible harm’s way and have a much better view of where the machine works.”

The Kwa Mhlanga Group now owns seven of these remote controlled marvels which has resulted in their tamper fleet being reduced with subsequent cost-savings as a bonus.

“Innovations like using remotely controlled Bomag Compactors inspired us to seek gaps in the civil engineering market where we were sure we could make a difference through mechanisation,” Francois adds. “The laying of kerbstones is an integral part of road construction and the in-situ laying process is at times very slow and labour-intensive. To speed up the process we invested in a mechanical kerbing machine that lays a continuous kerbstone, which is fed from a volumetric concrete mixer.”

Francois goes on to explain that kerbstones are typically laid once the sub-base coarse of the road has been laid. The upper levels of the road are then laid in between the kerbstones, which form the edge of the new road.

Conventional methods saw a grader process all the aggregate and cement material used and damage occurring when the grader uprooted or broke kerbstones.

“We thought that there had to be an easier and more efficient way of laying and processing the base materials and turned to Bell Equipment to demonstrate the use of a Bomag BF800P Paver,” he says. “Using a mobile aggregate batching plant we imported from Europe to feed the Bomag B800P Paver, we can now effectively lay over 1 000 tonnes of base material on a new road in under a day and do it efficiently without damaging the kerbstones at the edge.”

“We still have people around too so it’s not as if we’ve deliberately bought sophisticated mechanical equipment to replace people. We’re of the opinion that should our loyal staff of some 500 get the job done in 7 or 8 hours, they should not have to slave away for 12 hours a day. This, besides the quality of the finished product, adds to the freedom sophisticated mechanical equipment gives one.”

Francois points out that the Bomag BF800P Paver is a versatile machine, which is actually meant for laying asphalt, a discipline the company is planning to enter in the near future. This, the partners believe, will add value and increase their bouquet of services to the industry.

“We’re very excited about the potential the Bomag BF800P Paver has as already we’re pushing boundaries with extensions to its screed, increasing the width over which we lay down material from 5 to 6,5 metres,” he says. “This reduces wastage of material, saves time and ultimately has a positive effect on our bottom line, which is after all the reason we’re in business.”