

Bell Loaders drive production costs down at Flanders Quarry

The philosophy of managing business to drive down the rands per tonne cost of the aggregates that they produce has led the owners of Flanders Quarry in Durban to invest in three Bell Wheel Loaders, which are paying off handsomely.

Flanders Quarry is managed by Karl Stott, Leroy White and Tholie Cibane. Karl and Leroy are engineers by profession and are the company's Managing and Technical Director respectively. Tholie, who worked previously with the Department of Mineral Resources, is the Director of Mine Health and Safety.

The company was established at the end of 2011 on the premise that construction of the massive Cornubia development was imminent and that their Mount Edgecombe quarry would be a veritable gold mine from the onset. Karl explains: "The quarry had been a Tongaat-Hulett borrow pit. A large part was used for the construction of the Gateway complex but then demand fell away. We approached Tongaat-Hulett to revive it in anticipation of the work that was to come with Cornubia. However, as so often happens with construction, it didn't

take off as quickly as we thought and we limped along with a few contracts and a much less sophisticated product range than we have now."

At first Flanders Quarry hired in an excavator and a dozer. The following year they bought two excavators and a wheel loader and by 2013 they were able to start investing in crushing plant and the business began to grow. Today the company has a fleet of five crushing plants, which are fed by a fleet of excavators.

In mid-2015 they decided that their initial brand excavator and wheel loader brand was not well suited to a heavy duty mining application and introduced a Bell L1706E. "Our first Bell Loader improved our productivity substantially because it was a bigger machine, quicker and more robust. We were able to halve the rands per tonne cost to load by using Bell Loaders rather than using excavators, as we initially did. If you're doing 500 000 tonnes per year that's a R1 million saving straight on the bottom line," says Leroy.

"When business expanded and grew we approached Bell



Leroy White (left) and Karl Stott (right) of Flanders Quarry with Bell Equipment Sales Representative, Black Phillips.

again at the end of 2016 for another L1706E. For us it seemed like the ideal size machine, large and quick enough to load trucks and nimble to move around the site and stockpile. We bought the second unit and the initial forecast was that there would be a delay in delivery. In that time our Bell Sales Representative, Blake Phillips, supplied us with a pre-owned L1806E as a standby machine so that we could maintain production rates. Our new machine arrived earlier than planned so we took it. However, in that period our sales escalated and we found that we were still a machine short so we decided to also buy the L1806E because it had been running well after a few initial teething problems.”

Flanders Quarry follows a rigorous procedure when buying any new equipment. According to Karl, when looking for wheel loaders, the company decided that it would only consider machines built in Europe, America, Japan or South Africa. “We’ve learnt the hard way that these machines are more robust. The quality is better, you have less breakdowns and more efficiency. That gave us a shortlist and then we looked at the rands and cents of how much each machine can move for the initial capital cost. When we looked at the bucket size on the Bell it outclassed the competition by a long way. It’s got the same bucket that you find on competitor machines that are much bigger and cost substantially more.”

He adds: “We went to everybody and Bell was the only company that was prepared to change the bucket size to suit our operation. Nobody else was really interested in what the customer wanted. Bell was the only one to say, yes you can do this, we will do it for you, and we will guarantee the machine.”

Apart from the capital cost and the cycle time on the bucket, diesel consumption was another critical factor and Flanders Quarry has been well impressed with the fuel burn of around 14l/h.

One L1706E and the L1806E are working at the Mount Edgecombe quarry, a 5ha site that produces G grade material ranging from G5 to G9 that is currently supplying Cornubia and surrounds, and the N2 highway upgrade at Mount Edgecombe. This quarry will be depleted in the coming months and Flanders Quarry is in the process of setting up operation at its Canelands quarry, which is ideally located between Verulam and the King Shaka International Airport. The second L1706E is working at this 12ha site, which has a 10 to 20 year lifespan and about 7 million tonnes of material - infinitely more than the Mount Edgecombe quarry. The new quarry will also enable the company to offer blue stone products for the first time.

“Our machines work hard, about 220 hours per month and they load and stockpile constantly. Last month we did close to 100 000t of material between our two quarries,” says Karl. “Together the two Loaders at Mount Edgecombe loaded about 150 000t, or 350t per hour, loading from the crushers to stock and then loading into trucks.”

Warranty services are carried out by Bell but daily checks and other services are done by Flanders Quarry using Bell genuine parts. Other than planned services and the minor teething problems with the L1806E, the company has enjoyed 100% availability from their Bell Loaders.

“We’re impressed. Our Bell Loaders are good machines. It would take a lot for us to move away from Bell Loaders,” agree Karl and Leroy.

