

Polished Bell backup impresses Gentra 22

A heavy-duty mobile screen that produces enough material during daylight hours to keep pans going around the clock should be reason enough for any alluvial diamond miner to make the investment in such a machine.

This is exactly what Pieter Erasmus, owner of alluvial diamond mining company Gentra 22 has done and he has no regrets.

Thabazimbi-born Pieter Erasmus qualified as a boilermaker in Lephalale, the former Ellisras, and first worked for Xstrata Alloys at one of the company's chrome mines near Rustenburg. He then moved on to occupational safety before the lure of the alluvial diamond mining industry became too strong and he joined the well-known Schalk Steyn Diamonds as a sub-contractor.

"I was fortunate to have had Schalk Steyn as a mentor of note and, with his encouragement, I started mining on my own at this site we call Jasper Mine, which lies about 65km south of Douglas," he says. "We have two active pits, one about 400m from our plant and the other around 1,3km away."

Mining on Jasper Mine is done as stipulated by the company's environmental management plan with topsoil and overburden stockpiled for use in later rehabilitation of the area. The overburden, which varies between 1 and 4 metres, is stripped using a 75-ton excavator and the gravels below get ripped using a bulldozer before a 46-ton excavator loads the material into a Finlay 893 Heavy Duty Screen. Gravels vary in thicknesses of between 3 and 5 metres.

"We raised the sides of the Finlay 893 Screen to increase the capacity of the feed hopper from 10 to 15 cubic metres," Pieter explains. "Oversized and medium material is screened out immediately to be used as the base of our ongoing rehabilitation, which then avoids double handling. We load our gravels into dump trucks, which deliver to the stockpile that feeds our four 16-foot pans."

"The decision to buy the Finlay 893 Heavy Duty Screen was a relatively easy one as I'd experienced first-hand what the machine could do while working with Schalk," Pieter explains. "It is the only machine of its type that lasts and offers sustained service as the centrepiece of our operation, despite the extreme temperatures and environmental conditions we experience here."

Dust is a constant hazard in these arid parts of the Northern Cape Province as water is scarce and rainfall sporadic. Air filters have to be cleaned at the start of each shift, which works well as a form of preventative maintenance. Schalk Steyn had bought this particular machine new from Bell Equipment's Customer Service Centre in Kimberley and Pieter considers himself fortunate to have been able to take over the machine.

"We are constantly amazed that the Finlay 893 Heavy Duty Screens spew out gravel at an amazing rate of 750 tonnes per hour and that at a relatively miserly fuel burn of 12 to 14 litres an hour makes us happy miners. The most important thing though is that this machine produces enough gravel during daylight hours that we can keep the pans going throughout the night without having to actively mine at night, a policy that adds to our operational safety scorecard as we reduce risk."

Given Pieter's background in occupational safety, it is a subject that is taken seriously on Jasper Mine. All Gentra 22's plant and vehicles, including the Finlay 893 Screen, are fitted with PDS proximity devices that warn operators and drivers of pedestrians and other vehicles in a given radius.

"Any piece of plant or earthmoving equipment is only as good as the technical backup one can rely on from original equipment manufacturers and by the very nature of the mining we do, we realise that equipment will break down at times," Pieter adds. "We service our Finlay 893 Screen diligently every 250 hours and when we have a problem we can confidently rely on Bell Equipment and its Customer Service Centre in Kimberley to solve it quickly, which minimises our downtime."

"With this type of backup fresh in our minds we're seriously thinking of replacing our aging dump truck fleet with Bell B50E Articulated Dump Trucks, which we feel will be well suited to our 75-ton excavators and so bring down our production costs, which is paramount to any successful mining operation."



Bell Equipment Sales Representative, Eric van der Merwe (left) speaks to Pieter Erasmus, owner of Gentra 22, at Jasper Mine while the Finlay 893 Heavy Duty Screen works its magic in the background.

