

Translated Blue Cube Systems article which appeared in the Afrikaans language in the Stellenbosch newspaper Eikestadnuus, 8 April 2015.



Left to right: Francois du Plessis (managing director) and Pieter de Waal (executive director) of Blue Cube Systems

MINING ACTIVITIES IN STELLENBOSCH'S TECHNO PARK

“Every 15 seconds we provide real-time information to the mining industry on the performance of their recovery process,” says Pieter de Waal, executive director of Blue Cube Systems in Stellenbosch’s Techno Park. “We do it worldwide for client’s that use our equipment – South Africa, Chile, Australia, New Guinea, Russia and many more. What’s more, we do it from our head office in Stellenbosch, South Africa.”

Blue Cube Systems started in 2001 when managing director Francois du Plessis developed equipment for the mining industry which uses optical technology to identify minerals in ore, based on its colour and change in colour. This unique process evaluates in real-time the nature and quality of the mined minerals in process and makes the results instantly available. The technology surpasses conventional methods where mineral samples are physically and cumbersome drawn from mineral processing streams and the resulting analysis only available much later for use in process control.

Blue Cube Systems’ analysers are mounted in process plants directly on pipelines in which slurry – the mixture of water and pulverized ore – is pumped. The system measures the characteristics of the flowing ore with a single stainless steel plate and sapphire window the only point of contact, and converts the results to digital signals. These digitised optical signals are combined with laboratory reference values for the same slurry samples in a chemo-metric model. Blue Cube Systems mathematicians perform detailed analyses and interpretations of this model data. Based on the outcome, Blue Cube Systems calibrate the equipment at the clients remotely from

Stellenbosch and make the client-requested characteristics of the ore in real-time available to mine management. This information allows them to make immediate data driven operational decisions, resulting in significant potential financial gain for the mines.

The technology is also suitable for installation and measurement in hydro metallurgical and mineral sand processes.

Clients can buy or lease the equipment and enter into a service agreement with Blue Cube Systems to monitor and calibrate it. A network of service and sales agents are deployed in the primary mineral beneficiation areas.

Blue Cube Systems, together with the product and service that they offer, is yet another example of the innovative nature of businesses in Stellenbosch's Techno Park, a "Silicon Valley" type environment geared towards high tech South African businesses. In this case these innovative entrepreneurs identified an opportunity to develop and offer an unrivalled product which directly contributes to the operational efficiency of mineral processing and which elevates the mining industry internationally to higher levels.

Again a South African industry leader has proven that not only can we successfully compete internationally, but we are able to offer novel, innovative and far-reaching mining solutions to a world-wide audience.

Click on <http://bit.ly/1Af5yfk> to view the article on the Eikestadnuus' website.



Left to right: Helani Schreuder and Anne Adams in Blue Cube Systems' production department



Left to right: Ruan Botma, Pieter Theron, Lize Cillié and Fernando Nieuwveld in Blue Cube Systems' mathematical department