

## Waste Spreader Positioning System (WSPS)

Reutech Mining and Stone Three Venture Technology successfully collaborated in the delivery and deployment of the first Waste Spreader Positioning System (WSPS) at the Sishen iron ore mine in the Northern Cape, South Africa.



The system ensures the safety of the waste spreader operator by alerting him if the waste spreader moves too close to the edge of the waste heap. In addition, the system provides protection to the waste spreader which is achieved by calculating a safe zone on top of the waste heap that provides the waste spreader with the ability to move around safely on the waste heap while distributing material.

All this is made possible by the WSPS with its various sub-components working together seamlessly as one integrated system. The expanding waste heap is monitored using a terrestrial 3D laser scanner on a self-sufficient semi-mobile platform. The 3D scan data are then transferred to a central server via a Wireless Local Area Network. These data are then used to

calculate a safety boundary on the top waste heap. A high accuracy differential GPS located on the waste spreader determines if it is located within the safety boundary. If the waste spreader moves out of the safety boundary into the potentially high-risk area near the edge of the heap, an audio-visual alarm is triggered to warn both the operator as well as the control room.

The control room is equipped with a screen that displays the current position and safety state of the waste spreader in real-time. All data are stored to provide an accountable history.

All aspects and specifications of the system are fully customizable to the requirements of the client. The system is also capable of integrating with various other systems currently being used. All hardware and software components can also be monitored and controlled from a remote location.

"We are very excited about this product as well as the skill sharing between us and our partners. Through strategic partnerships with industry players and end-users, Reutech Mining will continue to deliver products that do not only have no equivalent in quality and technology, but also answer directly to the individual needs of our valued customers", says Cala van der Westhuizen, Marketing Manager of Reutech Mining.

"Stone Three Venture Technology's Mining Division is determined to grow from strength to strength by providing

creative turn-key solutions and support to the mining industry. The successful completion of the project and delivery ahead of schedule is an indication of our commitment to achieving our vision. We are looking forward to extending our partnership with Reutech Mining for future projects", says Louis Marais, Project Manager at Stone Three Venture Technology.



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## The new Self Powered Container (SPC)

In line with our policy of offering flexible solutions within the mining environment, Reutech Mining can now, in addition to our regular offerings, provide solar power options to suit the client's individual needs. In the case of remote access, or no available electricity, solar energy can provide a cost effective option.

The SPC is a multi-purpose, fully customizable sealed container unit used in cases where sensitive instruments need to be protected against the elements.

The system has the capability to remotely monitor and control all hardware housed in the container and also includes a fully customised Solar Power System.

Please don't hesitate to contact us with your special needs.



An example of the Self Powered Container (SPC)

## Successfully completed Arminera 2011 VIII International Mining Exhibition



Marco Pacheco of Clonsa Ingenieria (Reutech's South American distributor) enjoys a 'mate' (traditional South American infused drink) with our interpreter Cecilia during a short break.

Reutech Mining's recent participation with its South American distributor, Clonsa Ingenieria, at Argentina's Arminera 2011 Mining Exhibition reveals future potential for this region. The exhibition was attended by over 180 companies and government agencies from Germany, Austria, Bolivia, Brazil, Canada, Chile, USA, Finland, Great Britain, Mexico, Peru, Poland, Russia and South Africa

Reutech was well received at the pre-organised business rounds at the event, where the main focus was on new technologies that make the mining industry safer, allowing for its sustainability over time.

Reutech's highly specialised geotechnical products and services were of great interest for many existing opencast operations and new exploration projects in the region. Of particular significance was the reliable real time monitoring data which the MSR is able to produce on a 24/7 basis, the impressive global track record and its ease of deployment and integration with existing technologies applied in the industry.



Garth Day, Business Manager South America, is pleased with the overall response at the exhibition.

*...Safety and productivity through accuracy and reliability...*

## Annual Australasian User Conference

The annual Australasian MSR user conference was held on 16 and 17 March 2011.

The Sanur Beach Hotel on the idyllic Island of Bali was selected for the event. The scenic setting provided an ideal atmosphere for clients and engineers to exchange valuable information, case studies and requirements for the future.

The conference was followed by a visit to the PTNNT Batu Hijau mine where visitors had the opportunity to see 2 MSR 300 systems in action. Visitors were also treated to an in-depth explanation of the unique attributes of the mine in a remote island environment.

Our thanks to all involved and especially the management and personnel of Batu Hijau mine.

This conference will be followed by conferences in North and South America as well as Africa, to ensure that we create opportunities for all our clients to share their various fields of expertise with the rest of the MSR family.



*Delegates at work.*



*The ideal conference venue.*

## MSR now CE Compliant



In response to requirements of our clients, the Movement and Surveying Radar (MSR) was subjected to severe scrutiny by an independent facility to ensure compliance to all applicable European Union standards. Reutech Mining has now been authorised to use the coveted CE mark on all models in the MSR range. This again proves that Reutech continues to ensure that its products are and remain not only compliant to the relevant standards but more importantly safe for application by our clients.

Since the launch of the continuous improvement project in April 2009, Reutech Mining has drastically improved the operational performance of its systems. The global average operational availability for all systems has been achieved without the requirement for maintenance and repair technicians to be based permanently on the mine sites. Operational availability is defined as the user having access to usable and reliable geotechnical information. The following results have been obtained:

### MSR OPERATIONAL AVAILABILITY

Last 25 months	98.1%
Last 9 months	98.7%

## New members of our team...

Reutech Mining has expanded significantly over the past few months and we are proud to announce the following additions to our team:



**Elisma Lindes:** Marketing Assistant.



**Nicholas Brits:** Technician.



**Neville Greyling:** Software Engineer.

*We would like to welcome these members and wish them well with our future path together.*

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## Slope Stability 2011...

Reutech Mining is a Premier Sponsor for the upcoming International Symposium on Rock Slope Stability in Open Pit Mining and Civil Engineering. The Symposium will be held in Vancouver, Canada from 18-21 September 2011.

This specialty meeting will explore recent innovation and key developments in the design, analysis, excavation and

management of rock slopes. Slope Stability 2011 will provide a forum for mine owners and operators, consultants, engineers, suppliers and researchers to exchange views on how to promote best practices in slope stability investigations, design, monitoring and management.

[www.slopestability2011.ca](http://www.slopestability2011.ca)

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