



*TrainerAdvantage™ training course given by Immersive Technologies. A Custom Mine Site was created to accurately look like the real mine.*

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# Kinross acquires latest generation PRO3 simulator

The Kinross mining company made a step forward in incorporating advanced technology: it acquired the PRO3 latest generation simulator developed by **Immersive Technologies** especially for surface mining.

This is the first equipment of this series to be sold in Latin America, setting the standard in the region.

The simulator allows testing and training on machinery with realism never before seen by the mining industry, thanks to the incorporation of cutting edge technologies. The PRO3 is the result of many years of intense research and engineering work that culminated in equipment that optimises the operator's driving, with all the benefits that implies: lowering unscheduled maintenance; increasing machinery availability; improving hauling times and increasing production with a safer operation.

## Kinross' Vision

"The PRO3 simulator constitutes a key tool in training. With this simulator, our operators, in addition to learning to operate a high-tonnage rig, can practice procedures in cases of fires, brake and steering system failures, among

This is the first equipment of this series to be installed in Latin America. It allows training of machinery operators with absolute realism and a personalised configuration to improve the mine operation.

others. And at the same time it is a way of promoting the hiring of applicants with little experience and standardising the induction processes for all Kinross operations in Chile", stated Larry Radford, Regional Vice President of Kinross Chile, bringing attention to the fact that this acquisition conforms to the importance the company places on risk prevention and the safety and well-being of its employees. "Kinross' main purpose, in Chile and worldwide, is to generate value through mining, placing people first above any operating or production need. It was precisely that guideline that motivated us to implement the PRO3 simulator, through Kinross' Regional Good Practices Area, based on our ongoing quest for a high performance culture and developing the concept of responsible mining", the executive added.

Luis Parra, general manager of Kinross Servicios Ltda., said that this US\$1.7 investment is aligned with the value the company assigns to innovation

and the inclusion of new technology, "which demonstrates that continuous improvement is a central aspect of our business culture", he said.

The general manager pointed out that the equipment permits an excellent operator-machine relationship, thanks to its 180° screen that offers a simulation "with a surprising sensation of realism,



*Immersive Technologies Team. (From left to right) César Guerra, Regional Sales Manager Chile, Argentina, Bolivia; Guido Campos, Customer Support Manager-Latin America; Roberto Castro, Customer Support Engineer; José Ignacio Porras, Regional Vice President – Latin America.*



The operator can practice in an environment very similar to his workplace.

especially for the requirements of Kinross' operations in Chile". In that sense, he highlighted that the PRO3 has the mining company's local operations virtually installed in its systems, "That is, an operator assigned to La Coipa, Maricunga, and in the near future, to Lobo Marte, will have the opportunity to practice in an environment very similar to his normal workplace. That way, we will have heavy equipment operators who are better prepared and safer when it comes time to drive a wheel loader or a mining truck", he underlined.

## PRO3 Attributes

Based on exclusive alliances with the principal machinery manufacturers, such as Caterpillar, Liebherr, Komatsu, Hitachi and P&H Minepro, **Immersive Technologies** has the information and support to replicate exact models of original machines, making it possible for mining companies to train their operators in a rig that is the same as the one they will drive in the mine.

Added to this is the chance to use the simulator to practice unexpected events such as a fire, which is impossible to carry out and practice in an actual machine, thanks to a control system incorporated into the simulator.

Highlighted among the attributes of the PRO3 is the *Custom Mine Sites* – a personalised design program that includes digital images of the deposit in particular and its circuits, so the operators train in an actual digitalised environment. The equipment has a new *Real View* system that capture the driver's movements, which makes the perspective of the projected images interact according to how the operator changes his angle of vision when moving his head.

This new series of simulators includes a new motion base, which increases the durability of components as well as greater sensitivity in handling, offering quicker and more precise responses, increasing the realism of the training.

## Associated courses

In parallel with the installation of PRO3 in Kinross' premises in Copiapó, **Immersive Technologies** conducted the Trainer **Advantage™** course, which forms an integral part of the sale, to instructors from Maricunga and La Coipa, who in turn will train about 300 people including operators and supervisors. The course is divided into three modules: maintenance, operation and training.

Larry Radford noted that Kinross set up a training room for preparation in a safe place, "which will help people with less experience to overcome their initial fear of the equipment".

In addition, **Immersive Technologies** has delivered two products in its offer that will accelerate the ROI: the Training Systems Integration (TSI), teaching the instructors how to integrate this new simulation tool into the training process, so that the



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training phase is reduced from six to three months or less, with more hours of practice and without the need to remove a truck from the jobsite in order to perform tests. The other product is the Cross Functional Team (CFT), in which a multidisciplinary team is organised with support from the Vice President and General Manager of the mine, with the objective of improving, through the strategic use of the simulator, the company's key performance indicators (KPIs).



Luis Parra,  
General  
Manager  
of Kinross  
Servicios Ltda.



Larry Radford,  
Regional Vice  
President of  
Kinross Chile.

## PRO3 Innovations

Some of the innovative technological components of the PRO3 simulator are:

- Seamless 180° advanced display delivers unparalleled visuals for increased training engagement
- Ground breaking Real View technology provides a dynamic perspective of the training environment and increased realism around training hazards
- Low profile, accurate motion platform delivers optimum tactile feedback and sensitivity
- Trainer deck for safe observation of the trainee while the simulator is in operation
- Swing-in rear screen designed for training requiring a rear view such as dozer ripping
- Compatible with the extensive range of interchangeable Immersive Technologies Conversion Kits® for surface mining
- Designed to withstand the rigors of extreme global mining environments while providing reliability and comfort, through IP54 rating for extreme dust and waterproofing, increased standing room and an ergonomic trainer station