

Outstanding Operational Gains - Immersive Technologies' 14th Annual Business Improvement Award

31 August 2023



Immersive Technologies has announced the winners of its 14th annual Global Business Improvement Award which acknowledges the most outstanding [results](#) achieved by mining companies who use simulation as a key driver in mine optimization.

Category winners are selected from mining companies across 50 countries for their achievements in continuously improving operational safety, productivity and reliability through strategic simulator-based training initiatives. These projects demonstrate excellence in aligning people, process, and technology to push the mining performance envelope across any OEM make, this year's winners operate mixed fleets including Komatsu, Caterpillar®, Liebherr and Hitachi.

14th Annual Global BI Award Winners:

- Safety – Pamapersada Nusantara
- Reliability – Nevada Gold Mines
- Productivity – Usiminas
- Sustainability – Grupo Mexico
- Autonomous Haulage – Vale



As part of their vision to be the World's leading mining contractor with the best productivity, engineering and occupational safety and health and environment record, Pamapersada Nusantara (Indonesia) partnered with Immersive Technologies for a haul truck-based improvement project targeting accident reduction and machine fuel efficiency.

Results include:

- 12% Decrease in accidents
- 7% Decrease in damage caused by accident
- 3.9% Reduction in fuel burn

IMMERSIVE TECHNOLOGIES

Media Release



EXPECT RESULTS

Phone: +61 8 9347 9011

Fax: +61 8 9347 9090

Email: enquiries@ImmersiveTechnologies.com

Web: www.ImmersiveTechnologies.com

"Our initial implementation of Immersive Technologies simulators helped us create a work-readiness assessment to ensure operators had the skills to perform their duties safely. In this program new operators and those returning from leave were given a simulator-based assessment and training with the end goal of increasing mine safety and reducing mining incidents. The Custom Mine Site from Immersive Technologies helped us conduct this training with realistic operating conditions of Pamapersada Nusantara Mines."

- **M. Nabawi** - Operational Training Section Head



Nevada Gold Mines (Nevada USA) completed a continuous improvement project targeting improved machine reliability through decreased equipment abuse and proper operating technique on their CAT® 793C haul truck fleet.

Results include:

- 39% Reduction in abusive shifts events
- Up to 14% reduction in brake temperature events
- 42% Reduction in body up events



Usiminas (Brazil) completed a continuous improvement project focused on production efficiencies for their CAT® 777G haul trucks. With support from Immersive Technologies, USIMINAS completed a program which utilized real world data and simulation training data to identify operators in most need of training. Mining Operators then completed targeted simulator training to hone their skills.

Results include:

- 22% Improvement in haul truck spot times
- 4% Improvement in haul truck availability

"Our strategy for utilizing Immersive Technologies simulators in operational improvement has been multi-faceted. Our initial implementation of the Immersive Technologies simulator for the CAT® 777G truck was focused on operator safety. Next, we conducted a fuel efficiency study we verified a reduction in usage of 50,000 liters of diesel, which led us to the distinction in the 25th award for excellence from "Minerios e Minerales magazine 2023".

It was an honor to participate in these projects, Simulator technology allows us to train operators without the operational risks and also reduces training costs through reduced unproductive machine time."

- **Fabricio Lopes** - Mine Operations Instructor



Grupo Mexico Buenavista de Cobre (Mexico) utilized the fuel efficiency training capability of their Immersive Technologies simulator to improve the skills and behaviors of their haul truck operators. To assess the impact of introducing fuel-efficient behaviors, the fuel consumption rates of the equipment were measured both before and after the training.

Results include:

- 2.1% reduction in haul truck fuel used
- 5,000+ tons of carbon reduction

"The usage of Immersive Technologies simulators allowed us to achieve the objectives that were set at the beginning of the project. Our main operating expense is the consumption of Diesel and having achieved the objectives is very satisfying."

- **Ing. Jorge Millan** - Mine Operations Superintendent



Vale (Brazil) utilized Immersive Technologies simulators to drive skills development in PC8000 loader operators in an autonomous haulage circuit.

Results include:

- 5% increase in production dig rate
- 15% improvement in autonomous truck spot time
- 79% improvement in autonomous haulage system wait time

"Investment in state-of-the-art training technology is essential for mine productivity and safety. By investing in our people, they master their operating technique and show a significant improvement in productivity, safety and care for the machine's components. The work carried out with the Immersive Technologies team is a great case study of the need for continuous data driven training."

- **Caroline Mirian da Silva Reis** - Autonomous Mine Operation Coordinator - Vale

###

About Immersive Technologies

Immersive Technologies is the world's largest, proven and tested supplier of surface and underground Advanced Equipment Simulators to the global mining industry. The company has achieved this unique position by focusing on its mission to increase Customer profitability by optimizing the safety and productivity of their operators. Immersive Technologies' Advanced Equipment Simulators are helping hundreds of mining companies around the world to increase their equipment operators' safety and site profitability through effective simulation training.

With advanced simulator modules deployed in 50 countries, Immersive Technologies is dedicated to provide outstanding service. To deliver on this commitment the company has customer sales and support offices located close to its customers in Perth and Brisbane Australia, Salt Lake City and Tucson USA, Fort McMurray and Vancouver Canada, Zacatecas Mexico, Lima Peru, Santiago Chile, Belo Horizonte Brazil, Bochum Germany, Johannesburg South Africa, Jakarta Indonesia, Kolkata India and Moscow Russia.

Immersive Technologies has the global mining experience, innovative technology, product range, industry endorsement, proven support commitment and industry vision to partner with you to ensure your simulator training solution delivers the significant results you expect..

For more information and associated media please contact:

Andres Arevalo

Global Marketing Promotions Manager

Immersive Technologies

aarevalo@ImmersiveTechnologies.com | Tel: +61 (8) 9347 9011

www.ImmersiveTechnologies.com