How Global Mining Leaders Leaders Transformed High-Noise Safety with Sensear Headsets

Sensear
||·|||·· *SAFETY* THAT SPEAKS VOLUMES

Client: Global Mining Companies
Industry: Mining

Overview

From noisy haul trucks to underground scoop operations, clear communication in the mining industry isn't optional—it's critical to safety, productivity, and efficiency. But in high-noise environments where PPE is non-negotiable, traditional radios and headsets fall short.

That's why top oil and gas companies around the globe rely on Sensear's Intrinsically Safe (IS) headsets to stay protected, productive, and connected in the loudest conditions.

> That's why leading mining companies turned to Sensear's high-noise communication solutions—combining hearing protection, situational awareness, and multi-channel communication in one rugged platform.

The Challenge

Across diverse mining environments, workers faced significant communication and safety issues:

- **High Noise:** Cabins, pits, smelters, and wash plants exceeded 100 dB(A), requiring double hearing protection.
- **Disconnected Teams:** Face-to-face comms were impossible, and radio traffic was often overloaded or unavailable.
- **Removed PPE:** Workers frequently took off respirators or hearing protection just to communicate—creating serious risks.
- **Operational Delays:** Miscommunication in critical zones (like during mill relining or underground scoop work) caused safety incidents and slowdowns.
- **Hazardous Modifications:** In some cases, equipment was improperly adapted to fit hardhats or connect radios.

As mining operations pushed into deeper, louder, and more hazardous environments—from underground tunnels to smelters and haul pits—the demand for **Intrinsically Safe (IS) communication technology** became critical for both safety and operational efficiency.

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The Solution

Mining teams deployed Sensear's full range of Smart Muff, Smart Plug, and Short-Range communication headsets, tailored for each job—from smelters to scoop operations. With SENS® Technology, workers stayed protected while maintaining real-time awareness and communication via radio, Bluetooth® wireless technology, or short-range headset-to-headset links—even while wearing full PPE.

What Made the Difference:

- **Full Situational Awareness** while using Two-way radios or Bluetooth® devices
- **Clear Face-To-Face Conversation** without removing PPE
- **FM Short-Range Communication**—ideal for 1:1 comms within 50 meters
- **Rugged, Over-Ear Design** built for harsh field conditions
- **Future-Ready** planning for IS headset deployment in hazardous zones

The Results

Mining companies across the globe reported powerful results:

- **Increased Safety:** Reduced PPE removal and improved situational awareness cut down on injury risks.

- **Higher Productivity:** Real-time communication across teams reduced downtime in haul trucks, mills, and refueling operations.

- **Cost Avoidance:** Fewer equipment modifications and improved reliability reduced maintenance costs.

- **Incident Reduction:** Improved communication during high-risk operations (e.g., mill relining, scoop operations, cage lifts) helped prevent LTI incidents.

- **Team Confidence:** Workers trusted the gear—and each other—more in extreme noise zones.

> Sites reported improved communication, reduced LTI incidents, and higher PPE compliance after deploying Sensear's tailored mining solutions.

Looking Ahead

With mining conditions growing more complex and regulation tightening, Sensear headsets are quickly becoming standard gear for safety-driven operations—from open pit to deep underground.

Conclusion

Whether deep underground in a scoop, working near a 110 dB(A) grinder, or relining a massive mill—

Sensear makes it possible.

Sensear empowers mining teams to stay aware, stay connected, and stay safe.