MineARC’s Aura-FX Digital Gas Monitoring Technology for Refuge Chambers

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MineARC Systems is the global leader in the manufacture and supply of emergency safe refuge solutions and industrial equipment for the mining, tunnelling, chemical processing and disaster relief industries.

Emergency refuge forms an integral part of a tunnelling project’s broader Emergency Response Plan (ERP).

MineARC has developed an extensive range of refuge chambers unique to the tunnelling industry including:

- TunnelSAFE Gantry Design for TBM-mounted applications
- TunnelSAFE Rail and MSV Designs for full mobility
- TunnelSAFE Drill & Blast Designs for project flexibility
MineARC’s most recent innovation in refuge chamber technology is the Aura-FX Digital Gas Monitor, a proprietary fixed gas monitoring unit.

- Designed specifically for use within refuge chambers
- Easy to use, integrated solution
- Reduced risk of human error during an emergency
- Automated voice prompts and audible alarms as per ITA guidelines
- Digital display screens
- Monitors up to 11 gases at one time, including Methane
- Minimal calibration requirements
- External gas monitoring options available
- Real-time gas monitoring and diagnostics through MineARC’s GuardIAN system
When utilised in conjunction with MineARC’s GuardIAN, Aura-FX feeds gas monitoring data to any remote location.

- Allows for efficient identification of hazards and improves safety.
- Reduces time required for personnel to take corrective actions.
- Allows analysis and monitoring of internal refuge environment from the control room during an emergency.
AUDIBLE VOICE ALARMS

- Alarms and voice prompts provide additional assistance to occupants during an emergency.
- If gas levels are detected outside predetermined levels, alarms are activated.
- Prompts offer instructional notifications advising change-out of scrubbing chemicals and adjustment of oxygen levels.
INTUITIVE DESIGN

- Clear digital display provides easy interpretation of data and precise readings
- Suitable for work in dark and dirty conditions, the screen can be read in low or bright light
- Intuitive menu allows for easy navigation and fast access to information
- Calibration required just once every 12 months – can be conducted in-situ
- Easy sensor change-out by simply removing the click-in cover
MineARC is pushing the limits of safety standards by embracing digital transformation through our product development.

Through products such as Aura-FX, MineARC is demonstrating that safety systems need to go beyond basic protection, to provide a complete management solution.

Having an integrated safety network that provides real-time communications and reporting can increase the effectiveness of safety and emergency response teams in the event of an emergency...

... ultimately saving lives.