

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

Presented by : Davy Li





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



NAVIGATION

- HOME
- SETTINGS
- HELP

CHAMBERS

MA1362

ENVIROLAVS

ETS100

STENCH GAS

SGU200

GAS DETECTION

ND300

PERSONNEL

TAG BOARD

CHAMBER
CHECK-INCAMERA SERIES IV FAN BOARD **AURA** CAMS BATTERIES

Temp	31.7C
O2	20.8%
CO2	0.09%
CO	0.0ppm

AURA-FX GAS MONITORS



TEMPERATURE



REAL-TIME GAS MONITORING

- 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.





MineARC[®] Systems



HEAD OFFICE

MineARCAUSTRALIA

274 Welshpool Road, Perth,
Australia 6106
ph: +61 (8) 9333 4966
fax: +61 (8) 9333 4900
email: info@minearc.com.au

MineARCAFRICA

Stand 205, Flaming Rock Rd, Northlands
Business Park, 29 Newmarket Street, North
Riding, Johannesburg, South Africa
ph: +27 (0) 11 796 5162
fax: +27 (0) 86 504 1750
email: info@minearc.co.za

MineARC NORTH AMERICA

4850 W. Ledbetter Drive
Dallas, Texas, 75236
USA ph: +1 (214) 337
5100
fax: +1 (214) 337 5103
email: info@minearc.com

MineARC CHINA

Room 03C, Level16, Tower A, Germdale Plaza
Centre, No. 91, Jian Guo Rd, Chaoyang District,
Beijing 100022, China
ph: +86 10 5920 8299
fax: +86 10 5920 8111
email: info@minearc.com.au

MineARCSOUTH AMERICA

Avda. El Salto N°4001 oficina 142 A, Piso 14
Comuna de Huechuraba, Santiago, Chile
ph: +56 2 2964 4290
fax: +56 2 2964 4291
email: info@minearc.com

MineARCEUROPE

Carrer Dels Consellers 4, Barcelona,
08003, Spain
ph: +34 657 702 360
fax: +61 8 9333 4900
email: info@minearc.com.au