## High Heat Chamber Upgrades

Custom High Heat Chamber Upgrades are available for MineARC Refuge Chambers and Safe Havens to be used in high temperature underground locations. Select from a range of upgrades designed to provide greater comfort and extended protection for inhabitants during an emergency.



## **Optional Upgrades**

Helpina safeguard underground workers in over 65 countries, across six MineARC's continents. Refuge Chambers and Safe Havens are the world's most trusted underground emergency refuge chambers.

Custom high heat upgrades for Refuge Chambers and Safe Havens are available to suit site and location-specific requirements. Additional protections enable heavy duty cooling in extreme temperatures - up to 60°C.

## **Third Party Verification**

MineARC Systems have the engineering capabilities to perform in-house blast analysis calculations on all refuge chambers and safe havens. In addition, third party testing can be performed by professional blast engineers at an additional cost.

As part of an in-depth analyses, third party blast engineers will develop Building Damage Level (BDL) curves in order to test the

Select from a series of chamber upgrades to suit hazardous and high-heat underground mining or tunnelling environments. Upgrades offer extended protection from high heat and blast effects.

- 60 degree air-conditioning
- Insulation panels
- Battery upgrade up to 48 hours
- Blast resistant options also available

performance of a MineARC Chamber, taking into consideration the orientation of the unit with respect the explosion source.

In addition, blast engineers can also calculate the Occupant Vulnerability (OV); the percentage of personnel within the chamber that could sustain fatal injuries at different levels of building damage.