



## Mine Refuge Chambers

Shairzal Safety have been manufacturing refuge solutions to the Australian & Global mining industry since 2002. Over these years we have gained a reputation for quality, innovation and excellent customer service. We continue this tradition with our new 2010 model chamber that retains the Shairzal distinctive shape, colour and quality of build while incorporating the latest in life support systems new technologies.

Shairzal build, service, repair and upgrade emergency refuge stations and fresh air bases to keep miners safe.



Interior of unit with Air Scrubber CO<sub>2</sub> removal



### BREATHING AIR FILTRATION

Filtration is to AS1716 quality via a 3 stage filtration system. The rate of air flow is such that the total purge of the base is done every 3 to 4 minutes. This prevents the build up of CO<sub>2</sub> and minimises the heat build up. This allows indefinite breathing air duration as long as the plant airlines are maintained.

### BACK-UP AIR SUPPLY

A 36-hr back-up system, operated via a battery pack is installed. This unit removes CO<sub>2</sub> and provides breathing air for 36 hours.

### ESCAPE HATCH

A rear escape hatch is installed providing an alternative emergency exit.

### AIR CONDITIONER

A split system air conditioning unit ensures a comfortable environment for the occupants.

### HANDLING

Lifting points on the top of the chamber and forklift slots on the sides. The base is a full skid allowing the unit to be dragged if needed.

## STANDARD FEATURES

- Carbon Dioxide Scrubbing
- 2 Sources of Oxygen Supply:
  - » *Compressed (Mine) Air*
  - » *Internal Oxygen Cylinders*
- 3 Stage External Mine Air Filtration System (to AS/NZ5 1716)
- Reverse Cycle Air Conditioning
- 36hr Battery Back-Up System
- Rear Escape Hatch
- Reflective External Signage
- External Warning Lights and Siren
- Chemical Toilet with Separate Compartment
- Skid Base, Lifting Lugs and Forklift Slots
- Under Seat Storage

## OPTIONAL FEATURES

- 1000V / 240V Step Down Transformer
- Manual Gas Monitoring (using gas monitoring pump)
- Oxygen Candle (3 sources of oxygen supply)
- CO Scrubbing

## SCRUBBER CONTROLLER MODULE

LCD Screen showing:

- Battery Back-Up Charge and Discharge in Real Time
- Mains Input Voltage and Amps
- Inverter Output Voltage and Amps
- Automatic Battery Charging with Battery Condition Monitoring

## SIGNAGE

Highly reflective signage identifying the Fresh Air or Refuge Base in smoke filled or restricted vision areas.

## ENCLOSURE

We design and manufacture to meet specific customer needs. Sizes to cater from 4 to 30 people.