



Mine Fresh Air Base



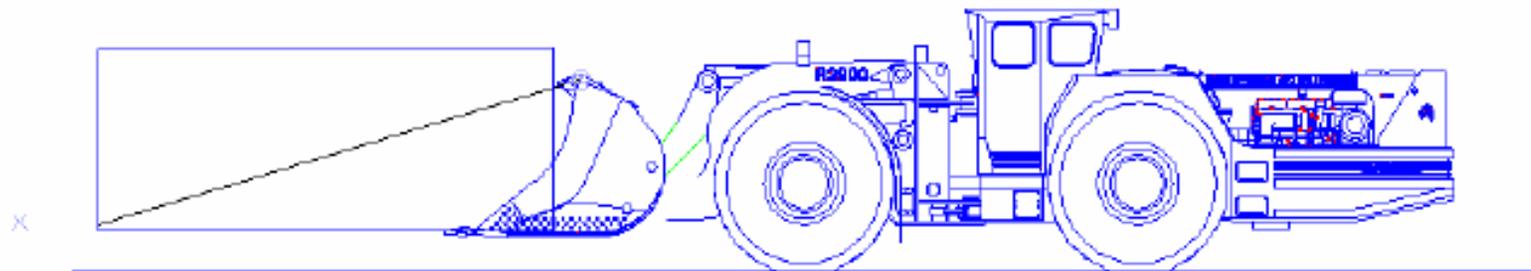
Overview

- Description of the Fresh Air Base
- Functional Descriptions of
- Operations: Controls and

Roof in Low Position



MSU Transport



Interior - Main Chamber



Roof Lifting Strut & CO2 Scrubber



Freezer Unit

With Cold



Gas Supply



- G size bottles - 5 in Main and 2 in Entry
- Controlled discharge via panels and piping

Air Supply



EXTERNAL AIR CONNECTION

Air Supply

Entry Compartment Air Curtain



Air Supply

External Air Valve and Relief System



Oxygen Supply



Oxygen Dosing Tank

CO2 Scrubber



Carbon Dioxide Scrubber Unit

Access



Main, Internal and Emergency Doors
Double Lock Compartment

Air Circulation



Air Circulation Fan & Control Valve

Facilities



Chemical Toilet

Facilities



Washbasin

System Operations and Checks: CO2 Removal

- 2 scrubbers powered by on board batteries
- 24 hour capacity
- Canisters requires periodic (approx 2 hrs)

System Operations and Checks: Electrical System

- External 240VAC with single isolator inside
- 2 internal power outlets (charger + 1 spare)
- 12VDC float charge to 3 x 102 AH batteries, 24 hour
- Batteries stored on shelf in Entry Compartment

System Operations and Checks: Charger & Batteries



Current Designs

- Extend Time to 90 Mandays
- Evaluating Alternative Power Units
- Increase Pulse Loading

Questions

