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**YOUR GREEN AND GOLD SOLUTION TO MANAGING HUMAN
WASTE IN AN UNDERGROUND MINE ENVIRONMENT.**



What is it?

- A portable, self-contained, odourless, low maintenance, underground toilet system.
- A purpose designed and built pod for the treatment of human waste in an underground mining environment where there is a constant supply of air and the availability of water.
- Produces NO odour
- Does not require pump out.
- Designed to be easily transported around the mine safely to keep pace with development and production operations.
- Never requires removal from underground unless damaged or in need of recommended 2 year service/ overhaul.
- Requires weekly inspection (as little as 15 minutes per pod per week).
- Robust design and construction to meet the needs of an underground mining environment.



How does it work?

The pod is a an aerobic treatment system or ATS. It is often referred to as a septic system but this is not correct. It is a small scale sewage treatment system similar to a septic tank system, but it uses an aerobic process for digestion rather than the anaerobic process used in septic systems.

The system is operated by,

AIR LIFT PUMP: for flush and circulation.

A simple and durable system

- no rotating parts
- high volume delivery at low pressure
- no powered parts
- higher efficiency compared to electric pumps
- infinite service life
- no “destruction” of organisms
- no clogging like electric pumps



DIFFUSER



Diffusers introduce fine bubbles that supply oxygen to the system and help break waste up in to smaller particles.

We use the Jager JetFlex® TD 65-2 G Tube Diffuser



NEW Blockage resistant pump.

Rags and heavy paper products (hand towel for example) can block current pumps in the market.

The all new, high flow- low demand AUSLOO pump will pass a rag through it without it getting stuck in the pump. One of the biggest issues with airlift pumps in this application.

the
AUSLOO pump.
1. High volume
2. Low demand.
One of the
developments
that sets us
apart from the
rest.



The system requires four critical elements to function efficiently.

- Enzymes - pelletised
- Oxygen (usually from a piped air supply and dispersed through the system using a diffuser).
- Water – a medium for the waste and enzymes to be suspended in
- Food – any organic matter

Without one or more of these elements the system will fail.



Enzymes

- The enzymes target the build up of organic waste matter present in the pod, including toilet paper.
- The enzymes act just as they do in nature by breaking down and digesting this matter into smaller molecules which naturally occurring bacteria can then easily convert into mainly water and CO2. This means that any nasty smells are completely removed!
- The enzymes are Non-Hazardous According to The Criteria Of Safe Work Australia.

Air supply

- The air supply operates the pump and diffuser.
- The diffuser breaks the solids into more manageable and digestible pieces and keeps the solids in suspension.
- The pump is used to circulate the waste and provide the flush and must operate continually.

Water supply

- Fresh water is recommended as high levels of saline can reduce effectiveness of enzymes.
- In areas of high saline mine water, 1000ltr cubes can be mounted close by for convenience or carried to the pod for refilling.

Food

- Any organic matter.



FAQ.

- How quickly will the enzymes act if the system breaks down and has to be rebooted?
Normally you will notice some improvement within 24 hours of adding enzymes.
- Are enzymes safe for the environment?
Yes – the enzymes used in BioZymes are completely biodegradable and safe for the environment.
- What do I do with waste if the pod needs removing from underground?
Use a waste disposal company to pump out the pod on the surface.
- Does the system work using “mine” water?
Some mine water is high in saline. High amounts of saline can adversely effect the enzymes. It is recommended to use fresh water.
- Can I use disinfectants or fresheners in the system?
NO. These will kill the enzymes
- Do I need to use special toilet paper?
NO. Commercial toilet paper is suitable



Consumables

- **BioEnzyme** - BioEnzyme contains the enzymes that create the biological environment required for the breakdown of the solid waste. Add as required. The pellets contain a small amount of food for the enzymes to sustain them until the system is in full use.
- **Antifoam** - Anti foam reduces the foam that can be created from the process.

SDS is supplied with each product.

Proudly brought to you by



The new standard in underground toilets

AUSTRALIAN designed.

AUSTRALIAN manufactured.

AUSTRALIAN owned.

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