WATERCARE MINING

Product Data Sheet:
Air Agitator

The Watercare Air Agitator controls sedimentation by keeping the solids suspended as a homogenous slurry that is consistently and safely pumped by the transfer pumps.

Approximately ninety percent of the solids found in a typical mine water reticulation system is removed in the clarifier and managed by the mud handling infrastructure. The remaining solids settle in the base of transfer dams and reticulation pipes, forming a highly compact layer. The sedimentation reduces dam capacity and contributes to transfer pump failure, increasing the risk of dam failure which could result in overflowing and flooding.

Watercare Mining has extensive experience in dam cleaning, a manual, labour-intensive function, that is both logistically challenging and risky with regards to health and safety. The Watercare Air Agitator controls sedimentation by keeping the solids suspended as a homogenous slurry that is consistently and safely pumped by the transfer pumps.

Applications

- Underground transfer dams
- Surface ponds
- Storage tanks
- Mechanical sumps

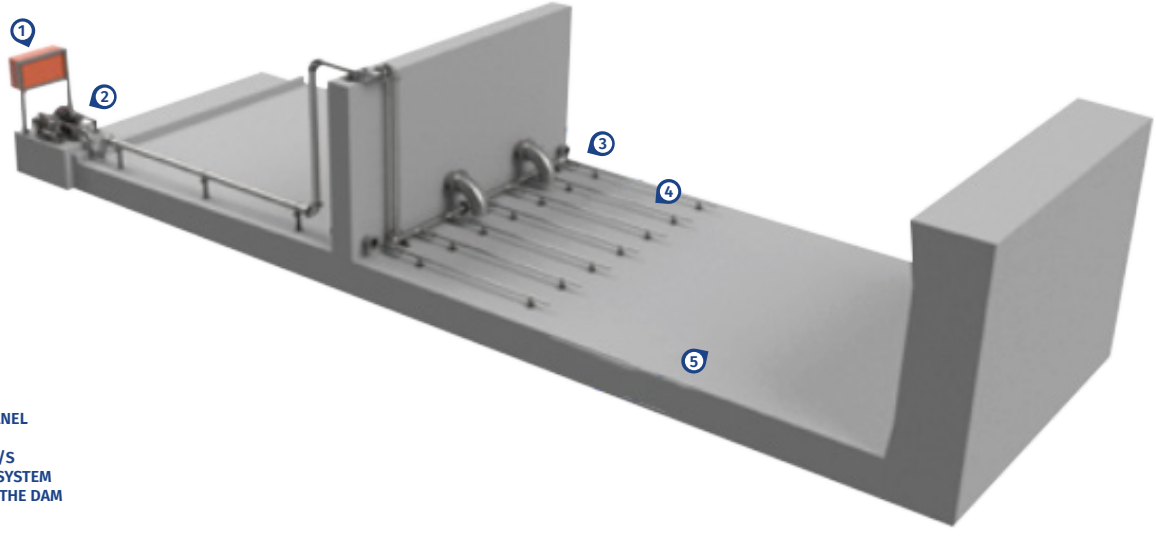
TYPICAL SPECIFICATIONS:

Maximum slurry SG	1.1
Piping materials of construction	Mild steel, galvanised
Maximum dam depth	4.8 meters
System overpressure protection	Pressure relief valves
Motor protection	IP65
Blower mount	Skid based
Noise level	76dB at 1 meter
Agitation Area (maximum)	100 m^2

Benefits

- Improved operation of dam level control
- Reduced risk of dam failure which could lead to flooding
- Improved housekeeping-Decreased downtime to clean the dams
- Decreased labour to manually clean the dams
- Improved working environment as the miners are not required to enter the dams to manually clean them
- Reduced transfer pump maintenance and repair
- Improved health and safety standards associated with the cleaning procedure
- Custom designed and engineered to interface with specific site requirements

FIGURE 1: SCHEMATIC OF THE AIR AGITATOR SYSTEM INSTALLED ON THE BASE OF AN UNDERGROUND DIRTY WATER TRANSFER DAM



1. CONTROL PANEL
2. BLOWERS
3. PUMP INLET/S
4. AGITATION SYSTEM
5. BOTTOM OF THE DAM

Telephone: 010 140 0870 | sales@watercaremining.co.za | www.watercaremining.co.za