

Mining Capabilities

Aerix Industries™ Foam Technologies produce an engineered geotechnical material containing uniformly distributed air voids. In its rigid form, it can be thought of as concrete having air as the aggregate.



MINING APPLICATIONS OF AERIX FOAM TECHNOLOGIES

- Annular Fill
- Yielding Mine Supports
- Lightweight Blocks for Ventilation Stoppings
- Longwall Recovery Room Construction/Support
- Cut/Fill Mining
- Abandoned Mine Backfilling/Subsidence Mitigation

ANNULAR FILL

The AERLITE™ family of products will produce an extremely lightweight annular grout that can be pumped long distances to fill behind shaft and tunnel liners, and over arch sets. Our AQUAERIX™ product can produce a pervious annular fill solution if needed.

GRANULAR MATERIALS TRANSPORT

Aerix Industries has developed an innovative foam product to transport granular solids such as sand, mine tails, and waste crusher fines either in a pipeline or for backfilling large voids. The process is proven to provide a cost effective and environmentally sound alternative to traditional transport methods. ARX-Transport™ uses up to 95% less water and suspends the solids particles during transport without any segregation, resulting in lower velocity and less pipeline abrasion. At lower velocities, the flow pattern changes from turbulent to laminar flow, which reduces the energy demand and allows for a wider range of pumps that can be used to transport the tailings.

ADDRESSING ABANDONED MINES

The AERLITE family of foam liquid concentrates can be used to deliver cemented or self-compacted fill into subsidence voids and other openings related to active and abandoned mines. Subsidence cracks, intersection caves, stopes, shafts, portals, and adits can be filled with cellular lightweight concrete incorporating tailines, crusher fines, fly ash, and coarse materials up to 3/4". Pipes, decant lines and culverts, tanks, and conveyor and pipe galleries, can also be filled quickly and economically. Our pervious AQUAERIX product can be used in pipes to continue to allow flow while reducing the subsidence risk from old pipes. The pervious cellular lightweight concrete can also be used in adits and portals that produce water, to provide a physical barrier and roof support without building hydraulic head.



Aerix Industries™
Engineering Solutions for Project Savings

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