



BACKFILL

The AERLITE family of liquid foam concentrates can deliver cellular concrete or compacted fills, including paste fill. Tails or other waste products can be incorporated with the foam and utilized underground for cut and fill mining, ground support and pillar recovery. The AERLITE products 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. Adding an AERLITE product to paste fill will improve rheology, reducing yield stress by more than 50% and reducing moisture content while minimizing segregation and increasing slump and compressive strength.

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 also produce a pervious annular fill solution if needed.



TAILS, ORE & MATERIAL TRANSPORT

Aerix Industries has developed an innovative foam product to transport solid materials, such as mine tails, fine ores, and waste crusher sands either in a pipeline or for large void-fill. The process provides a less expensive and environmentally sound alternative to traditional transport methods. ARX-Transport uses up to 95% less water and suspends the tailing particles during transport without any segregation, resulting in lower velocity, less abrasion and minimal sanding. 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.

RECLAMATION

The AERLITE family of foam liquid concentrates can be used to deliver cemented or compacted fill into subsidence voids and other openings related to active and abandoned mines. Auger holes, subsidence cracks, intersection caves, stopes, shafts, portals and adits can be filled with cellular lightweight concrete incorporating tails, 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 still allow flow while reducing the subsidence risk of old pipes. The pervious cellular lightweight concrete can also be used in adits and portals producing water to provide a physical barrier and roof support without building head.

