BOART LONGYEAR

Controlling the water around mine sites is a top priority during the life of the mine. Water plays an important role – whether there is too little, too much or whether it needs to be monitored for safe mining practices.

During exploration drilling, water tables are recorded when core samples are taken. This information leads to the development of a successful mine water management system for the mine site. During the development of a mine, significant local water tables can be encountered and if not handled correctly, by the mine operators, the water levels can lead to low productivity and safety concerns.

By identifying the level of underground aquifers, the mine site can best manage the water in the mine. Having too much water in a mine causes various issues, including an increase of wear on equipment and stability of mine walls becoming questionable.

A common method for managing these issues is through a dewatering process. Dewatering is removing water from a mine site via wells, pumps and drains. By lowering the water levels, the mine can begin to work under dry and safe conditions.

Boart Longyear, a global leader in mineral exploration and service for the mining industry, identified a market need in Australia and has recently expanded its mine water services into the region. With an office in Adelaide, Australia, and a significant customer base in the large Australian iron ore mining industry, Boart Longyear is using mine water services it developed in North America over the last 25 years.

The Boart Longyear mine water services are primarily utilised for monitoring water tables in and around the mine, supplying water needed in the mining process and/or lowering water tables to allow safe and efficient mining. Piezometers and other instrumentation can be installed in the holes for ground monitoring, and horizontal drains can be drilled to eliminate perched water, which causes pressure on mine pit walls.

Boart Longyear utilises a unique flooded reverse circulation process capable of drilling large diameter holes in the most difficult ground conditions in a single pass, rather than multiple passes. This process improves the likelihood of drilling a straight borehole to target depth successfully, while avoiding multiple passes, which degrades the borehole.

This distinctive method provides better overall well efficiency and production; ultimately saving Australian mine sites downtime and money over the life of the well.

The mine water service includes well drilling and construction, which can be used for open pit and underground applications. A large fleet of dedicated rigs develops wells by installing casing, filter material and surface seals to regulatory specifications.

As production advances to deeper targets, demand for deeper, larger diameter wells also increases. The fleet offers pullback capacity of 70,000 to 130,000 pounds to manage down-hole tooling in large diameter and deep well applications.

With a continued focus on safety while also driving efficiency and productivity, Boart Longyear Drilling Services developed and honed this effective reverse circulation method in North America, and established the leading process within the industry while creating the most highly specialised crews in the world for mine water services.

Boart Longyear offers a full range of mine water service drilling: production, dewatering, re-injection, monitoring, geothermal and municipal wells. In addition, Boart Longyear provides pump installation and servicing in North America.