



Replacement of a drainage line in an underground mine.

Atacama Kozan
Chile | 2019

Working Conditions:

Underground work

Pexgol Pipes:

Pexgol 160 mm (6"), class 10, 15, 19, 24 & 30

Application:

Dewatering

Length:

3573 m

The Challenge

Atacama Kozan, a mining company engaged in the production of high-purity copper concentrate in the Atacama region (Chile), required to change one of the two lines in the mine's main drainage system. They need a pipeline with a non-invasive installation to make sure the mining operation was able to continue working in the shortest time possible.

Pexgol Solution

The client decided to install 3,573 meters of Pexgol 160 mm pipe in different classes: 10, 15, 19, 24 and 30. They chose to use cross-linked polyethylene due to:

- Savings in time and costs due to its long-length supply format with fewer joints.
- Ease of installation, thanks to the flexibility of the pipe that was able to be accommodated without problems in the curves of the interior of the mine.
- Limited installation times to avoid stopping the mining operation.
- Cost savings by optimizing and selecting the pipeline laying according to the pressures and hydraulic profile of the project.

Installation was quick and easy, the pipeline was uncoiled entirely and then dragged into the mine. Eight electrofusion joints were made, in addition, on-site consulting was carried out for the electrofusion work.





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Advantages

- **High resistance to wear:**
Pexgol is the preferred solution for abrasive materials transportation. Typically resists three times more than HDPE and twice more than steel.
- **Excellent chemical and corrosion resistance:**
Pexgol pipes can resist a wide range of chemical agents, slurries, toxic and radioactive materials.
- **High temperature resistance:**
Working temperatures can range from -50°C/-58°F up to 110°C/230°F.
- **Superb internal and external corrosion resistance:**
Our pipes are proven to withstand decades of exposure to corrosive environments, with nonstop performance in some of the world's harshest environments.
- **Long pipe sections:**
Pexgol pipes can be supplied in long coil lengths, reducing number of joints, installation time and risks.
- **Creep and impact resistance:**
Crosslinked Pexgol pipes can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue. Furthermore, Pexgol pipes are completely resistant to cracks even when dragged over sharp rocky terrain and coagulated salt crystals.

