# High pressure dewatering in open pit mine Case Study | N°102





Pexgol pipe installation for open pit mine drainage.

# **Lundin Mining** Chile | 2021

# **Working Conditions:**

Flow: 720 m<sup>3</sup>/h

# **Pexgol Pipe:**

Pexgol 315 mm (12"), Class 32

# Application:

Open pit mine dewatering

# Length:

3240 m

# The Challenge

Lundin Mining, in its Candelaria Tierra Amarilla mining unit, required the installation of a high-pressure dewatering line from the lower level, passing through mine banks.

Due to time problems, the mining company needed to have a pipeline where its installation would not be invasive for the mining operation and continue working in the shortest period of time possible.

# **Pexgol Solution**

After receiving advice from the local team (Crosspipe Systems) the client decided to install 3240 meters of Pexgol 315 mm class 32 pipe for their mine dewatering system. The project consisted of 5 pumping stations, with dropouts of up to 200 meters between banks, with twin lines of Pexgol 315 mm class 32.

EF couplers, metallic reinforcement and alignment clamps were used for the projection of joints in the dropouts.

Pexgol was selected for its long-length supply format, for its ability to be unhooked from the mine benches and the possibility of providing short installation times, which facilitated assembly and commissioning.





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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.



