



## Transportation of water with solids from an open cast mine

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**Doña Inés de Collahuasi  
SCM, Collahuasi Mine**  
Chile | 2013  
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### **Working conditions:**

Extreme environmental temperatures  
(-25°C to 40°C)

### **Pipes used:**

Pexgol 225 mm, Class 24 (SDR 7.4)

### **Application:**

Mine dewatering

### **Length:**

4,000 m

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### **The Challenge**

Collahuasi Mine required to transport water from the cast mine. Due to the harsh environmental conditions of the field, the engineering team decided to make a change on the type of material they have been using historically.

### **The Solution**

A 4,000 meter Pexgol pipe was installed from the bottom of the cast mine to the load area. It required a Pexgol pipe 225 mm Class 24, in long sections of 320 meters that enabled an easy installation. The Pexgol pipe was design to resist the working life cycle of the dewatering system, without suffering any damages on the pipe itself, the operations or the employees working on it. Collahuasi Mine has become one of the Golan's key clients regarding the use of dewatering lines among Chile's mines. The pipe installed has been in use since 2013 with no failures.



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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 non-stop performance in some of the world's harshest environments.
- **Low weight:**  
Compared to steel or rubber, Pexgol's solution results in reduced transportation, storage and labor costs due to lower weight per meter.
- **Long pipe sections:**  
Pexgol's pipes can be supplied in long lengths coils, reducing number of joints, installation time and risk.
- **Creep and impact resistance:**  
Pexgol's crosslinking piping solution can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue. Our pipes are also completely resistant to cracks – even when dragged over sharp rocky terrain and coagulated salt crystals.

