



## Slurry transportation with high nickel levels

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### **Working conditions:**

Extreme transport temperature (110°C)

### **Pipes used:**

Pexgol 500 mm, Class 15 &  
Pexgol 355 mm, Class 15

### **Application:**

Slurry transportation

### **Length:**

350 m

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### **The Challenge**

Moa Nickel used to transport leached slurry from the tubular reactors to the CCD thickener feed line. This process caused several issues on different pipe materials. The transported fluid was composed by:

- 28-32 g/l acid
- 1,00 g/l N
- 0,54 g/l Co
- 1,00 g/l Fe
- 21,00 g/l SO<sub>4</sub>
- 30,0 g/l free acids

Solids: 0,086% Ni, 0,013% Co, 46,00% Fe

Previously, titanium Sch20 pipes were installed, but it suffered deformations and it needed to be repaired constantly. The titanium pipe was replaced for a stainless steel pipe 316 Sch40, and it lasted 8 years and it finally required to be replaced because it presented wear issues.

### **The Solution**

Golan provided 11.8 meters of pipes sections with mechanical joints that could resist corrosion, high temperatures and wear with no effort. Regarding the prices per meter, installation costs and maintenance, versus stainless steel and titanium pipes, Pexgol proved to be the most convenient option.



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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.

