

# Navigating extreme conditions with Pexgol's PE-X pipes

The innovative solution from Pexgol for Anglo American Peru's piping challenges.



## Anglo American Perú Peru | 2023

### • Working Conditions

Temperature: 15°-20°C (59° - 68°F)  
Flow: 450 m<sup>3</sup>/h  
Pressure: 22 bar  
Fluid components: Tailings with high percentage of solids 70%CW

### • Pexgol Pipe

Pexgol 14", SDR 11

### • Application

Tailings transportation in copper mining

### • Length

180 m / 590 ft

### The Challenge

In 2023, Anglo American Peru, a global mining leader, faced a significant challenge at its Quellaveco mine. The existing HDPE pipeline, designed for transporting copper tailings with high solids (70%CW) at a temperature of 15-20°C (59-68°F), a flow rate of 450 m<sup>3</sup>/hr, and a pressure of 22 bar, required an urgent upgrade. The pipeline needed to be rapidly installed on a steep slope with a 60-meter (197-foot) drop, to enhance the capacity of the concentrator plant and integrate cyclones into the system.

### The Solution

The 14-inch PE-X pipes from Pexgol, with a total length of 180 meters in two segments of 90 meters each, were the chosen solution. Using Pexgol fittings like Electrofusion Couplers, Stub Ends, and Support Bridges, the installation was completed in approximately 7 days by a specialized team. The process involved a Pexgol vertical uncoiler and two cranes, ensuring a quick and efficient setup. The critical benefits of the Pexgol piping system, such as quick installation, high chemical and corrosion resistance, lightweight handling, and long lengths, were key to making it ideal for the project.







# The Advantages of Pexgol Pipe Systems



## 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.



## 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.



## Excellent chemical and corrosion resistance

Pexgol pipes can resist a wide range of chemical agents, slurries, toxic and radioactive materials.



## Long pipe sections

Pexgol pipes can be supplied in long coil lengths, reducing number of joints, installation time and risks.



## High temperature resistance

Working temperatures can range from  $-50^{\circ}\text{C}/-58^{\circ}\text{F}$  up to  $110^{\circ}\text{C}/230^{\circ}\text{F}$ .



## Creep and impact resistance

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.

For more information please visit:  
[pexgol.com](http://pexgol.com)

