Drinking Water on Sloping Terrain



Installation of a drainage system between a well and a mining dam.



AquaMag Colombia | 2019

Working Conditions

Temperature: ambient Pressure: 3 bar Sloping terrain

Pexgol Pipe

Pexgol 160 mm (6"), class 10

Application

Potable water transport

• Length

188 m

The Challenge

AquaMag, the aqueduct and sewerage company of Santa Rosa de Lima (Colombia), uses pipes that are exposed on the lands or farms of the inhabitants of this population to transport raw water for treatment. Due to uncontrolled agricultural burning on the farms, a section of the existing HDPE pipe was burned.

AquaMag needed to continue supplying drinking water to 1,600 people, transporting 10 liters per second, from the San Sebastián river to Santa Rosa de Lima.

The Solution

The client ultimately decided to install a Pexgol pipe due to its ease of handling on complex terrain, resistance to wear, UV rays (since the pipe was exposed), longer life compared to other materials, and the ability to supply it in rolls, which allowed for fewer joints.

Due to the terrain conditions, the installation took 10 days, which would have taken 25 days if another type of pipe had been used.

43 electrofusion joints were made, as sections of HDPE pipe were replaced by Pexgol in different areas. In critical points, a complete section of Pexgol pipe was used.









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.



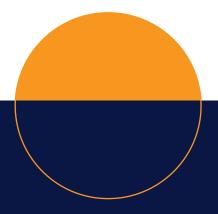
High temperature resistance

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