



Pexgol pipe for the transport of fluorosilicic acid.

.....
Phosphate Mine -
ICL Rotem
Israel | 1995
.....

Working Conditions:

Pressure: 5 bar / Temperature: 60°C

Pexgol Pipes:

Pexgol 250 mm
Pexgol 280 mm
Pexgol 315 mm, Class 10

Length:

Systems made up of hundreds of meters with elbows, tees and branches.

The Challenge

From the beginning ICL Rotem used HDPE, 316 stainless steel and rubberized steel pipes for the transport of fluorosilicic acid. Beyond the costly installation, the tubes suffered from corrosion and wear, forcing maintenance workers to replace the tubes every 5 to 9 months, and on several occasions to stop production altogether.

Pexgol Solution

- In the first instance, PE-X test tubes were placed in the fluid to be transported. Once the laboratories certified that the acid did not carry out any chemical attack on the tubes, 12 meter pipe sections were installed with electrofusion couplings.
- Since then, in 1995 till today thousands of meters have been installed transporting fluorosilicic acid without having to replace the tubes or have to carry out any maintenance.
- The resistance to high temperatures, abrasion and chemical attacks caused the maintenance costs in the process plant to be significantly reduced and the investment amounts to be reduced in new plant expansion projects.



Pexgol pipe for the transport of fluorosilicic acid.

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.



Tubería de acero engomada después de 6 meses de uso

