



Installation of Pexgol pipes for drainage in a vertical ground

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Ferrexpo Poltava Mining
Ukraine | 2019
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Working Conditions:

Vertical installation
Ambient temperature: -30°C to 40°C /
-22°F to 104°F

Pexgol Pipes:

Pexgol 315 mm (12"), class 30
Pexgol 315 mm (12"), class 24
Pexgol 315 mm (12"), class 19
Pexgol 280 mm (10"), class 10

Application:

Mine Dewatering

Length:

2700 m

The Challenge

Ferrexpo Poltava Mining required the installation of pipeline for mine dewatering to be installed vertically from the bottom of the quarry to its surface. The pipe needed to be resistant to cracks and be provided in long sections in order to avoid many joints.

Pexgol Solution

The client decided to install Pexgol pipes with OD 315 mm (12") with 30, 24 and 19 class in coils by 90 and 120 m each for most difficult areas where the pressure varied from 32 to 15 bars. At the end of the line Pexgol OD 280 mm (10"), class 10 pipes were used in straight sections of 11.8 m.

All the pipes were connected by electrofusion couplers. In the places with high pressure were also used reinforcements for a safe installation.

A Caterpillar D10T bulldozer and the 40 ton excavator was used for unwinding the coils on core. Then the pipe were dropped from the top by the bulldozer & excavator. All connections were made with the electrofusion couplers. In the most difficult areas were also used reinforcements and fixpoint bridges.



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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 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.

