



Dewatering through shafts for an underground lead-zinc mine.

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Turkey | 2019  
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**Working Conditions:**

Pressure: 20 bars  
Ambient temperature

**Pexgol Pipes:**

Pexgol 160 mm (6"), class 24

**Application:**

Dewatering

**Length:**

350 m

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**The Challenge**

Esan had to pump dirty water from -600 meters at their underground lead-zinc mine, through narrow shafts to upper levels of the mine. They usually used HDPE and steel pipes but they had clogging problems. This time Esan wanted a pipe that will not clog and will be very easy to install, with no need of fittings installed in the narrow shafts. They tried to find alternatives to prevent leakage problems on the fittings that caused to change them many times.

**Pexgol Solution**

The client decided to install 350 meters of Pexgol pipe. They choose Pexgol due to it's experience with providing long pipe sections that enable to avoid installing fittings in narrow shafts and because of the resistance of the pipe to scale build up. Thanks to Pexgol the installation took just 6 hours, Esan reduced their operation downtime. Esan built their own decoiler and decoiled the pipe by themselves.



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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  $-50^{\circ}\text{C}/-58^{\circ}\text{F}$  up to  $110^{\circ}\text{C}/230^{\circ}\text{F}$ .
- **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.

