Case Study #172

Fast and Reliable Solution for Winemaking Processes



How Pexgol streamlined water transportation at Zuccardi Winery



Zuccardi Winery Argentina | 2024

Working Conditions

Temperature: Ambient Flow rate: 150 L/min Pressure: 2 bar Fluid: Potable water

Pexgol Pipe

Pexgol 90 mm, class 15

Application

Potable water transport

• Length

120 m / 393 ft

The Challenge

Zuccardi Winery, internationally acclaimed for its innovation and quality in wine production, needed to implement a potable water transport line to supply both consumption and vinification processes. The challenge was to connect the storage tanks—located in a separate building—to the main plant through a system that ensured a fast, safe, and efficient installation. Additionally, the solution had to minimize leakage risks while optimizing installation time and costs.

The terrain conditions called for a reliable piping system that did not require a sand bed for burial and could be handled easily, considering operational and space constraints around the winery.

The Solution

Zuccardi selected 90 mm Pexgol class 15 pipes for the project. This decision was based on Pexgol's key advantages, including:

- **Rapid Installation:** The 120 meters of pipe were uncoiled and laid out in just 20 minutes.
- **Fewer Joints:** Thanks to the long-length coil format, no joints were needed along the run, significantly reducing leakage risks and associated costs.
- **Easy Handling:** The lightweight material enabled efficient transport and installation, even under limited operational conditions.
- Strength and Adaptability: The pipe required no sand bed for burial, simplifying the installation process.

The final installation was carried out two days after trench preparation and took only 2 hours, including burial and backfilling. Both ends of the pipeline were connected using flanged couplings to ensure system integrity.







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.



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

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.

