

Success in Agricultural Desalination: Water Supply Challenges

Pexgol technology can overcome challenges in shallow well applications, offering an efficient and cost-effective solution for leading companies in the agricultural industry.



BerryMex México | 2019

• Working Conditions

Temperature: 21°C / 69°F
Pump pressure: 163 PSI y 540 m³/hr.

• Pexgol Pipe

Pexgol 250 mm (10"), SDR 11

• Application

Borehole

• Length

243 m / 797 ft

The Challenge

BerryMex, a leader in the agricultural industry and recognized for its high-quality production of strawberries, raspberries, blueberries, and blackberries, faced a significant challenge at its desalination plant in Mexico. The company needed an efficient and cost-effective solution to transport seawater from shallow wells to its treatment and desalination plant.

The shallow wells drilled next to the sea had to be constructed with corrosion-resistant pipes, capable of withstanding the weight of the water column and the 1,250 kg INDAR submersible pump. Initially, BerryMex considered using plastic pipes like PVC or CPVC, but these would not withstand the weight, risking the loss of the pump. The other options, stainless steel or superduplex pipes, were too costly in terms of materials and installation.

The Solution

Pexgol introduced its innovative crosslinked polyethylene (PE-X) pipe as a corrosion-resistant solution with the capacity to withstand the required weight. In addition, the low roughness factor of Pexgol pipes prevents scaling, which extends their lifespan and minimizes maintenance interruptions.

Since their installation, Pexgol pipes have shown exceptional performance in BerryMex's four wells, with no issues or decrease in water supply to the desalination plant. The installation time in each well did not exceed 4 hours, demonstrating the efficiency of the process.

The BerryMex team was able to easily assemble the Pexgol pipes at the construction site, using electrofusion couplings and load clamps on a steel base plate. With only two joints required per well, the Pexgol pipe system proved to be a cost-effective and durable solution.



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°C/-58°F up to 110°C/230°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

