

Pexgol's Solution for CFE: A Leap in Durability and Efficiency



Transforming water transportation with Pexgol technology



Comisión Federal de Electricidad Mexico | 2023

• Working Conditions

Temperature: 30°C / 86°F
Pressure: 8kg

• Pexgol Pipe

Pexgol 6", class 15

• Application

Sea water transport

• Length

150 m / 15748 ft
90° elbows and mechanical flanged joints

The Challenge

The Federal Electricity Commission (CFE), Mexico's leading electricity company, at its Empalme (Sonora) facility, faced significant challenges with its existing stainless steel pipelines used for transporting treated seawater. The saline environment and corrosive nature of seawater led to frequent corrosion of the steel pipes, requiring constant short-term maintenance efforts. Seawater is used for cooling turbines, so any failure in the line can lead to downtime in production. Replacing stainless steel pipes required skilled welders and large cranes to handle the tubes due to their high weight.

The Solution

Pexgol provided a comprehensive solution with its 6" RD11 pipes, specifically designed for challenging conditions like those at CFE. Pexgol pipes, known for their high chemical resistance and corrosion resistance, offered a robust alternative to stainless steel. Pexgol's flanged coupling and elbow fittings facilitated a smooth installation process on the existing rack, and the lightweight nature of Pexgol pipes allowed for easier handling and maneuvering during installation. Quickpipes Systems provided on-site technical support, ensuring a seamless transition to Pexgol pipes. This solution not only accelerated the installation process but also significantly reduced maintenance needs, thanks to Pexgol's durability and the long pipe lengths that minimized the need for joints.



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

