

# Overcoming Corrosion Challenges in the Oil Industry



Pexgol's Solution in Oil and Water Transportation for Petróleos Sudamericanos.



## Petróleos Sudamericanos Argentina | 2023

### • Working Conditions

Temperature: 40°C / 104°F  
Flow: 700 m<sup>3</sup>/d  
Pressure: 10 kg/cm<sup>2</sup>  
Fluid components: Water and oil. Oil cut 5%.  
Pipeline layout: Overhead

### • Pexgol Pipe

Pexgol 110 mm, class 30

### • Application

Oil + water transport

### • Length

1700 m / 5577 ft

## The Challenge

Petróleos Sudamericanos S.A., a company with over 30 years of experience in oil and gas exploration and production in Argentina, was facing significant problems with its existing infrastructure for oil and water transportation. The current line, composed of recovered 2 7/8-inch tubing, suffered from internal and external corrosion, which not only decreased operational efficiency but also posed environmental risks due to potential leaks. Additionally, the pipe's transport capacity was insufficient to handle the increase in flow from the producing wells connected to the collector.

## The Solution

To resolve these issues, Petróleos Sudamericanos decided to replace the existing line with 110 mm, class 30 Pexgol pipes, known for their high resistance to chemicals and corrosion. The new installation aimed to improve operational efficiency, increase transport capacity, and reduce environmental risks associated with leaks. Double mechanical connectors and flanged couplings were used to ensure a safe and efficient installation.

The installation of the five 350-meter rolls of pipe was completed in a record time of 3 days, meeting the client's stipulated deadlines. This process included making two road crossings without the need for casing pipes, which simplified the installation process and minimized disruption to existing operations. The new Pexgol pipe not only eliminated corrosion issues but also provided a lightweight and easy-to-handle solution, allowing for quick installation and improving operational safety.

The project demonstrated Pexgol's ability to meet the demands of the oil industry, offering a durable and efficient solution for hydrocarbon transportation. The installation met high operational and safety standards, significantly reducing maintenance costs and environmental risks.



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



## 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](http://pexgol.com)

