

Efficiency and Durability in Handling Muddy Water



Case Study: Pexgol's Solution at the Palm Oil Plant.



Industrial Aceitera del Casanare Colombia | 2023

• Working Conditions

Temperature: 90° a 100°C / 104°F
Flow: 40 m³/d
Fluid Components: Muddy water (POME) with a high organic load

• Pexgol Pipe

Pexgol 200 mm, class 15

• Application

Muddy Water Transport

• Length

270 m / 885 ft

The Challenge

Industrial Aceitera del Casanare S.A., a palm oil processing plant in Colombia, faced the need to install a new line for the transportation of POME (Palm Oil Mill Effluent) from the plant to the oxidation ponds. This fluid, with a high organic load and operating at temperatures between 90°C and 100°C, posed a significant challenge due to its corrosive and abrasive nature. In 2022, the company had already tested a 100-meter section of Pexgol pipe, achieving excellent results in terms of resistance and durability.

The Solution

To address this challenge, Industrial Aceitera del Casanare decided to use 200 mm, class 15 Pexgol pipes over a length of 270 meters. The choice of Pexgol was based on its great resistance to high temperatures, corrosion, and abrasion, promising a durable and reliable solution for the transportation of POME. The implementation of Pexgol allowed the plant to reduce downtime, as well as the costs and times associated with maintenance.

The installation of the 270 meters of Pexgol pipe was carried out efficiently using only two GP mechanical joints. This process did not require special tools, which further simplified the installation and minimized disruptions to plant operations. Since the implementation of the new line, Industrial Aceitera del Casanare has experienced a significant improvement in operational efficiency, with a notable reduction in maintenance times and plant downtime.

The success of this project highlights Pexgol's ability to handle extreme operating conditions and highly corrosive and abrasive fluids.



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

