



Installation of a Pexgol elbow with mechanical joints to replace HDPE.

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Antioquia Gold
Colombia | 2022
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Working Conditions:

Fluid: Sludge
Temperature: 40°C / 104°F

Pexgol Pipe:

Pexgol 45° elbow 160 mm, class 15;
GP flanged coupling 160 mm

Application:

Slurry transport

The Challenge

Antioquia Gold, a Colombian mining company, required continuous maintenance to the HDPE pipe (160 mm PN16) that they used for the discharge to the FALCON 1 gravimetric concentrator, which suffered from constant abrasion problems. It had to be thermofused in very short sections to give the necessary radius of curvature in the operation. This pipe had a durability of 1 to 2 months maximum.

Pexgol Solution

Due to its durability, ease of installation (mechanical) and because it does not require maintenance, Antioquia Gold decides to use a Pexgol elbow.

The elbow was installed and after 90 days of testing, the elbow and the connections have maintained hermeticity without fluid loss, maintaining the integrity and initial conditions during the period of operation, when subjected to the expected conditions.

Thanks to the benefits of Pexgol elbows and the versatility of the GP flange coupler, the tolerance of the elbow and its easy handling, the operation cuts were carried out satisfactorily. The elbow was installed by simply aligning the mechanical flanges, making the installation complete in 20 minutes.



Installation of a Pexgol elbow with mechanical joints to replace HDPE.

Advantages

- **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:**
Crosslinked 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.

