



Replacing steel for PE-X pipes to transported processed water.

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**Rosebel Gold Mines -  
IamGold**  
Suriname | 2020  
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### Working Conditions:

Pressure: 60 PSI  
Flow: 70 m<sup>3</sup>/h  
Temperature: 45°C  
Fluid: Processed water

### Pexgol Pipe:

Pexgol 225 mm (8")

### Application:

Processed water transportation

### Length:

100 m / 328 ft + elbows + tees + reducers

### The Challenge

At the Rosebel Gold mine they had serious scale problems in the water transport line for the SAG Fees Chute mill.

They generally used steel pipes that ended up becoming encrusted, which resulted in them needing to be cleaned and on many occasions changed in periods of 3 to 5 months. This generated losses in production and a large cost for the maintenance that the steel required. Additionally, in the periods of use, the pumping pressures had to increase since the internal diameter of the pipe was reduced.

### Pexgol Solution

The client was aware of the advantages of Pexgol to prevent fouling in lime slurry transport applications and therefore it was decided to proceed with a first section for testing.

With the Pexgol piping system, which has a low internal roughness, long radius elbows and mechanical accessories were supplied that helped ensure that even between the joints there were no interferences.

Today the system has been working for more than 10 months without problems or fouling, which is already a success for the client since its installation is simple and the costs are lower than steel pipes.





# Replacement of steel pipes for PE-X

Case Study | N°105

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The connections were mechanical, it was only necessary to cut the pipe to size and place screws. PE-X is much lighter than steel, so fitting it to the piperacks was also simple. Additionally, the plant has Victaulic-type connections on the steel pipes, which made the job simple as Pexgol can also connect with Victaulic.



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## 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.

Scaled steel pipes that were replaced.



Pexgol pipe installed on site.

