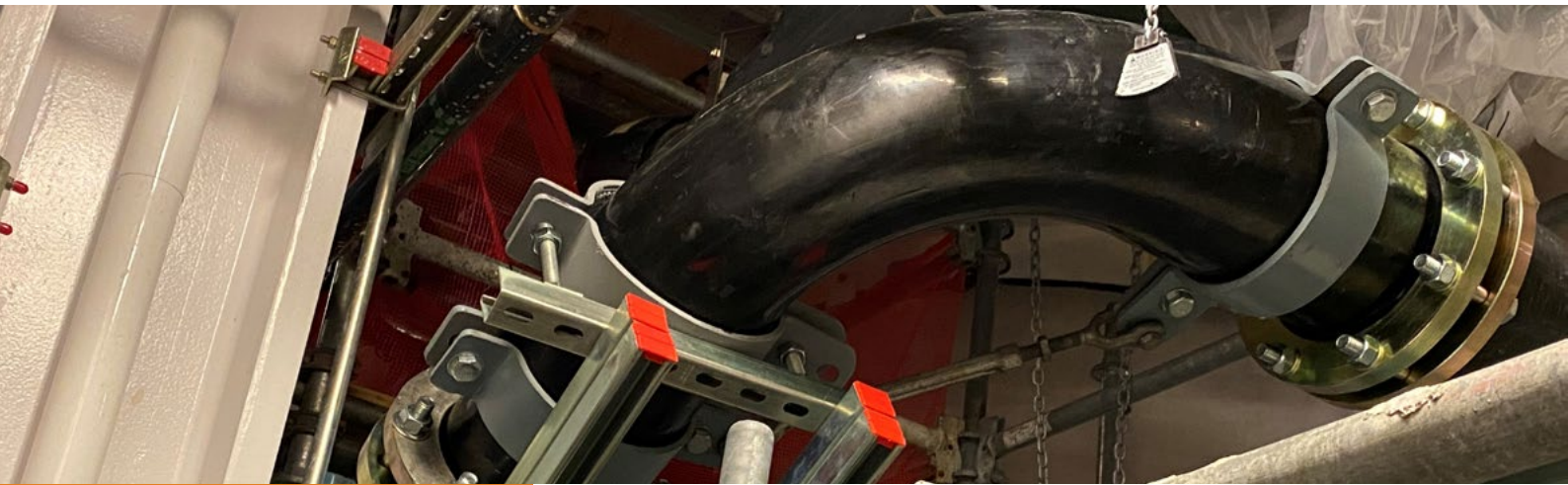


Slurry: Pexgol's Superior Alternative to Traditional Piping



Addressing Scaling and Line Plugging with Advanced PE-X Piping.



Chip Manufacturer USA | 2022

• Working Conditions

Temperature: 37°C / 100°F
Pressure: 150 psi

• Pipe

Pexgol 50, 110 & 225 mm, class 15

• Application

Slurry transportation

• Length

20 m / 65 ft

The Challenge

In 2022, a prominent chip manufacturing company located in Portland, USA, grappled with issues surrounding their existing PVC and Steel pipe system for slurry transportation. The components of the fluid transported, such as Calcium Hydroxide, Hydrofluoric Acid, and Hydrochloric Acid, were causing significant scaling, leading to line plugging. Given the high operational temperature of 100°F (37.7°C), the challenges were exacerbated, resulting in frequent downtimes and compromising the efficiency of operations.

The Solution

In response to these challenges, Pexgol was approached to offer a resilient solution. Pexgol 50, 110, and 225 mm class 15 pipes, known for their long lifespan, durability, and scale resistance, became the prime choice. These pipes spanned a length of 20 meters (65.6 feet) and were integrated seamlessly to handle the extreme working conditions, which included pressures of up to 150 psi.

Furthermore, an array of fittings such as the EF Coupler, Flange Coupler, PE-X Lined Fitting, Flared End/Stub End, Loose Flange, Pexgol Elbow, Pexgol Reducer, and Pex-C fittings were employed. This comprehensive integration ensured minimal scaling, reduced costs, and ease of assembly.

The Pexgol pipes were swiftly integrated into the slurry transport system. With their flexibility and durability, these pipes offered a hassle-free solution.

After a year and a half of continuous operation, the Pexgol system exhibited no signs of scale buildup, eliminating the need for the regular shutdowns and cleanups that plagued the previous systems.

Additionally, the close collaboration between Golan and the contractor optimized the design to further mitigate the issues of scaling. The results? A dramatically enhanced operational efficiency, minimized downtimes, and a significantly prolonged lifespan of the slurry transportation system.



The Advantages of Pexgol Pipe Systems

PEXGOL
X-LINKED PIPING SOLUTIONS



High wear resistance

Pexgol is the preferred solution for abrasive materials transportation. Typically resists three times more than HDPE and twice more than steel.



Superior external corrosion resistance

Pexgol withstands 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 endure 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 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 tolerate abnormal 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

