### Case Study #142

## From Steel Struggles to Pexgol Progress

**DEXECUTIONS** 

Boosting Productivity and Reducing Maintenance in Livestock Feed Production.



X Ambar Israel | 2022

### Working Conditions

Temperature: Ambient Pressure: 2 bars

## • Pipe Pexgol 125 mm, class 15

### Application

Pneumatic transportation line

## • Length

1000 m / 3280 ft

## The Challenge

For years, Ambar, a major livestock feed manufacturer, relied on Carbon Steel and Stainless-Steel piping systems for transporting their vital raw material – Monocalcium Phosphate (MCP). MCP, an essential mineral supplement providing a balanced source of calcium and phosphorus for animals, is typically combined with other ingredients to produce nutritionally rich feed.

These metal pipes, integral to Ambar's operations, unfortunately showed significant vulnerabilities. With severe scaling and, in specific points like elbows, noticeable abrasion, the pipes caused inefficiencies in production and frustrating downtimes. Such complications made regular, and resource-intensive maintenance, which involved special cleaning methods every six months, inevitable. The hardened scaling material turned almost as tough as rock, demanding the deployment of heavy machinery, extensive hours of manual work, and in certain instances, total pipe replacements.

Ambar had 7 operational pipelines, each stretching over 3,280 feet (1,000 meters), with numerous elbows and connections. Recognizing the need for an efficient alternative, two years ago, Ambar initiated a trial using the Pexgol piping system, targeting one of the 3,280 feet Carbon Steel lines for replacement.

## **The Solution**

The Pexgol solution included: 125 mm class 15 PE-X piping supplied in 1,000 meters (3,280 feet) together with GP Flange Couplers, Flared ends, and Double connectors .

Continuous piping in coils allowed for quick, on-site, cut-to-size installation, while taking advantage of the natural bending capabilities of the Pexgol pipe. Scaling, maintenance and down-time has been significantly reduced.











# The Advantages of Pexgol Pipe Systems







#### High wear resistance

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 endure a wide range of chemical agents, slurries, toxic and radioactive materials.



High temperature resistance Working temperatures range from -50°C/-58°F up to 110°C/230°F.



#### Superior external corrosion resistance

Pexgol withstands 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

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**