

Innovation in Safety: Pexgol Piping System for LPG Supply



A Case Study on the Collaborative Engineering and Strategic Implementation of the Pexgol Pipeline System for Public Safety and Efficiency



Rawabi City
Israel | 2010

• Working Conditions

Pressure: 6 bar

• Pexgol Pipe

Pexgol 32 mm to 250 mm, class 15

• Application

LPG Transportation

• Length

8500 m / 27887 ft

The Challenge

Rawabi, a city located in the Judean Mountains faced a unique challenge: to replace private gas supply with a LPG (Liquefied Petroleum Gas) to the city while conforming to International Standards.

The new gas supply pipe design challenge included:

- High mechanical resistance to withstand high pressures and external wear and tear.
- Continuous sections to minimize connection points.
- Long-Term durability to minimize maintenance, and maximize the return on investment (ROI).

The Solution

The solution to this complex challenge was found in Pexgol's Class 15 SDR-11 pipes, with sizes ranging from 32 mm to 250 mm. These pipes were specifically designed for compatibility with Natural Gas & LPG transportation, having been certified to meet or exceed the following standards:

- API 15PX: Comply with the standard
- ISO 14531: Certified
- AS 2492: Certified
- ASTM F2905: Certified

Over four months, Pexgol's team worked closely with the design group, providing technical guidance and ensuring complete adaptation to all requirements. The success of this project stands as a testament to Pexgol's commitment to innovation, collaboration, and safety, contributing to a future where the residents of Rawabi can live without the concern of private gas tanks and enjoy the benefits of a safe and efficient public gas supply 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 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 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

