



Replacement of HDPE pipes for PE-X to transport industrial treated water.

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**Chip Manufacturer**  
Israel | 2021  
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### The Challenge

A semiconductor chip manufacturer company located in Israel, needed to replace an 10" HDPE line that transported industrial waste water to an MBR treatment facility.

### Working Conditions:

Design temperature: 50°C  
Pressure: 4 bar

### Pexgol Pipe:

Pexgol 400 mm (16"), class 10

### Application:

Industrial treated water transportation

### Length:

1000 m / 3281 ft

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### Pexgol Solution

Having seen Pexgol's experience in other projects in Israel and around the world, the client decided to install a 1000 meter Pexgol 400 mm, class 10 pipe.

The client was able to install the entire system in only 20 days since the pipes were supplied in sections of up to 57 m. Furthermore, Pexgol pipes do not require expansion loops since the pipe is able to withstand contractions and elongations without deformation.

Using Pexgol pipes allowed a faster installation time, helping reduce the total cost of the project.

It minimized potential failure points. Also reducing the cost of connections along the line.

The installation was done on pipe-racks of 8.5 meter above ground. The connections were made using electrofusion weldings and flanges. Additional fittings such as PE-X elbows and others were used.





# Industrial waste water to MBR treatment facility

Case Study | N°103

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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  $-50^{\circ}\text{C}/-58^{\circ}\text{F}$  up to  $110^{\circ}\text{C}/230^{\circ}\text{F}$ .
- **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.

