



Installation of Pexgol pipe to transport fiber optic cables.

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**Sinohydro**  
Israel | 2021  
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### **Working Conditions:**

500 meters hanging without supports  
inside service shaft

### **Pexgol Pipe:**

Pexgol 50 mm (2") Class 15  
Pexgol 63 mm (2") Class 15

### **Application:**

Fiber Optic Cables Transport

### **Length:**

Pexgol 50 mm: 14,050 m / 46,095 ft  
Pexgol 63 mm: 9,100 m / 29,855 ft

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### **The Challenge**

Sinohydro, a Chinese state-owned hydropower engineering and construction company, wanted to install fiber optic cables through a vertical shaft 500 meters deep. They needed conduit pipes that would withstand the tensile forces of the pipe weight. The pipes have to be embedded in concrete, so they have to resist the temperature of the concrete during casting.

### **Pexgol Solution**

Pexgol was chosen due to their ability to withstand high tensile forces and high temperatures. The 63 mm pipe was provided in 13 coils of 700 m each and the 50 mm pipe was provided in 13 coils of 1080 m each. Only a double mechanical connector was used to hold the pipes above the pit.





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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.

