



An outdoor hydrant and indoor sprinklers were installed at Guyana airport

**Cheddi Jagan  
International Airport**  
Guyana | 2018

**Working Conditions:**

Water: 6 bar  
Hydrants: 12 bar  
Indoor Sprinklers: 18 bar

**Pexgol Pipe:**

Pexgol 110, 125, 160 & 225 mm  
32 Class 19

**Application:**

Water Supply & Fire Extinguisher Line

**Length:**

xxx

**The Challenge**

Cheddi Jagan International Airport were going under renovations in order to expand their operations. One of the main challenges for them was installing a fire extinguishing line all over the airport. The main concern for the engineering company (China Harbour) that was caring out the project was to find a suitable pipe line that required minimum maintenance, a material that can withstand hard installation conditions and minimum possible installation time, since this kind of lines usually requires a lot of work. The other challenge was the installation of the water supply line. The conditions were also hard and they required a pipe in compliance with ASME standards.

**Pexgol Solution**

The Designer Engineer required China Harbour to install PE-x pipes for both lines. Pexgol pipe systems was chose due to its capabilities that allow the pipes to be drag on concrete, steel and all over the construction site making the installation efficient and fast. With other materials such as PE, tons of precautions to not damage should been necessary. Pexgol pipes were also a great solution regarding possible water hammers caused by the hydrant trucks in case a fire develops, since the pipe can withstand them.



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The pipes were connected with mechanical fittings, and they also didn't required special treatment. The installation with Pexgol pipes took x2.5 times less than any other material like PE. This pipes would have required special care to install the fittings, a much longer installation time and detailed supervision. During the installation, local workers were trained on the field and complete the installation with great success.



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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's pipes can be supplied in long lengths coils, reducing number of joints, installation time and risks.
- **Creep and impact resistance:**  
Pexgol's crosslinking piping solution can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue. Also are completely resistant to cracks even when dragged over sharp rocky terrain and coagulated salt crystals.

