Transport of compressed air for underground mine Case Study | N°101





Installation of Pexgol pipes through a chimney for compressed air.

HMC Gold Chile | 2021

Working Conditions:

Pressure: 16 bar

Pexgol Pipe:

Pexgol 160 mm (6") Class 19

Application:

Compressed air transport

Length:

283 m / 928.47 ft

The Challenge

HMC Gold, in its Tambo de Oro mining unit, required to install a line of compressed air from the surface to the interior of the mine, through a chimney of approximately 2.5 meters, made with a raise boring drilling equipment.

Pexgol Solution

Having seen Pexgol's experience at the Meridian mining company, where compressed air was also transported, HMC Gold decided to install a 283 meter Pexgol 160 mm, class 19 pipe.

Using Pexgol pipe allowed to eliminate the compressed air equipment inside the mine and to enable a main equipment on the surface. The system was enabled in less than 48 hours. They needed a pipe that resists a vertical 220 meters of chimney. Pexgol made work easier thanks to its long length, mechanical resistance to dragging and its good creep behavior.

For the installation, the pipe was de-coiled on the surface, then the sagging was started with the help of a weight at the tip and an upper containment with a support equipment. A concrete support was made at the top and connected to the compressor equipment via a 995 style stub end and flange coupling. A 995 style coupling to another line was installed at the bottom.

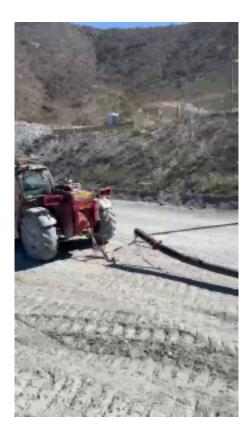




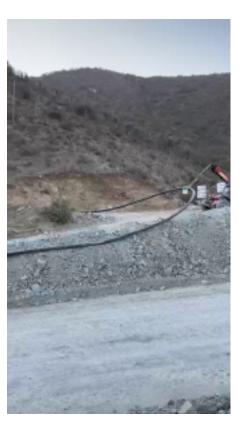
Installation of Pexgol pipes through a chimney for compressed air.

Installation time:

- 1) Coil assembly and unwinding: 1 shift of 12 hs.
- 2) Pipe hanging: 1 shift of 12 hs.
- 3) Enabling and connections: 1/2 shift of 12 hs.







Transport of compressed air for underground mine Case Study | N°101



Installation of Pexgol pipes through a chimney for compressed air.

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.



