High corrosion resistance against brine Case Study | N°89





Pexgol fittings for brine transportation at a Brazilian chemical company.

Unipar CarbocloroBrazil | 2019

Working conditions:

Composition: 74,8% NaCl; 0,077% NaOH; 0,002% Na2CO3; 0,853%

Na2SO4; 24,33% H2O Temperature: 77°C / 170.6°F

Flow: 69 m³/h

Pump pressure: 8 kgf/cm²

Pexgol pipes:

Pexgol 125 mm (4"), Class 15

Application:

Brine

Length:

Prefabricated elbows and short sections

The Challenge

Unipar Carbocloro is a Brazilian chemical company that operates in the soda and chlorine industry. At the outputs of the brine pumps, Carbocloro used to replace its piping components at least once every 6 months. They tried several materials and not one had performed successfully. The last ones were made of nickel and yet did not last more than six months, having leakages all around. The high corrosivity of the media was the main issue to be faced.

Pexgol Solution

Pexgol's engineering team analyzed the whole situation, suggested a new design using Pexgol pipes and accessories and nowadays the output of the pump has worked non-stop (and with no signs of probable stops) for 9 months already.

The installation, despite the solution being formed by several parts, was easy and quick. Carbocloro's team simply based the tasks on the plans providaded by the factory.

High corrosion resistance against brine Case Study | N°89



Pexgol fittings for brine transportation at a Brazilian chemical company.

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.



