

Purafil Puts the Pressure on Corrosion in Copper Mines

SANTIAGO, CHILE

Codelco, the world's largest copper producer, teamed up with Honeywell to create Kairos Mining, a joint venture to maximize production through automation systems in Codelco's concentrator plants. They now rely on Kairos Mining (a molybdenite concentrator plant) to improve the process and performance of its concentrator plants. With such a key role to play, Kairos can't afford to slow down productivity due to repeated computer failures in their control rooms caused by high levels of H₂S. Kairos Mining worked with Purafil and FiltraChile to implement a solution to address the H₂S, which helped with computer failures and air quality.

Purafil's Corrosion Classification Coupons (CCC) revealed that Kairos' control rooms were experiencing GX levels of corrosion from high levels of H₂S. This is what was contributing to the failure of the newly installed control stations and computers that were critical to production. In addition to causing electrical components in the computers to fail, the H₂S was a potential health hazard—so much so that the operations team carried personal H₂S sensors.

To address both issues, Purafil focused on pressurizing the control room and reducing the contaminant gases in the air throughout the entire plant. Purafil installed a side access unit (PSA) filled with Puracarb to remedy this. **In addition to reducing corrosion levels from GX to safer, healthier levels, the PSA improved the quality of the air such that Kairos hasn't experienced further electrical shorts in their computers.** The reduction in H₂S in the air also made for a higher quality of life for employees and **allowed Kairos to reduce maintenance and replacement costs as well as downtime.**

Pablo Puentes, Kairos' Electronic Engineer, summed up working with Purafil with an African proverb: If you want to go fast, walk alone; but if you want to go far, walk accompanied.

