

Santa Luisa Mine

Project specifications

Project type: Mine
Application: Sprayed concrete

Partners

Owner: Santa Luisa
Concrete supplier: (provided by the mine itself)



Background

Teamwork between partners with enough in-house expertise and knowledge to solve the specific challenges of a mine is one of the key success factors of mining projects. In a lead, zinc and copper mine located in Huallanca, Peru, a glaring issue was spotted by Prodimin, a mining specialist. They strongly advised to replace the reinforcement with a high quality, steel fiber reinforcement solution, such as Dramix®.

The challenge

The reinforcement solution that was originally planned for this did not meet the technical requirements for safe and durable sprayed concrete reinforcement. Because of the bad rock mass conditions, the sprayed concrete needed a higher quality steel fiber solution in order to meet the requirements for energy absorption and compressive strength.

The solution

Thanks to the Prodimin geotechnical engineers being there on site and performing the calculations, an important problem was discovered, preventing potentially dangerous mining activities.

Dramix® steel fibers not only met the technical requirements for this sprayed concrete application, but its higher aspect ratio also meant that fewer fibers were needed overall, decreasing the cost of the solution and increasing the safety of the mining operation.

The combination of on-site support with a high-quality reinforcement solution were crucial in the success of this project.