

# Implementation of Three-Dimensional Geological Models in Photogrammetric Projects

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## SUMMARY

Technological advances provide us with new tools to develop in a more agile way the different processes that previously required a lot of time and dedication.

Making quick and appropriate decisions is essential for the continuous progress of our projects and through the use of specialized software in geological modeling of deposits it is possible to improve the analysis and configuration times of our open pit mining operations, this coupled with the Integration of the topographic and photogrammetric processes that allow us to visualize the topography of the land in a more realistic way, by linking it with the geology has allowed us to make optimal decisions for the development of the projects.

The graphic description of the terrain and the possibility of measuring real distances on a 3d model allow the integration of the mining operation in the planning process, thus guaranteeing compliance with the planning.

We have been making these integrated 3D models for the last few years and we have been able to perform sequential analyzes year by year according to the frequency of the flights we make. The graphic outputs and the analysis of the multitemporal mining progress have allowed us to carry out an adequate monitoring of our exploitations, thus guaranteeing compliance with the plan and the stability of the slopes over time.

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