

# DESIGN, SIMULATION AND OPTIMISATION OF SAG MILL CIRCUIT USING THE JKSIMMET SIMULATOR

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## ABSTRACT

*This paper's objective is to establish the metallurgical parameters for the studied minerals in a design and simulation project of copper ores, in order to achieve the best behaviour according to the product size, power and material throughput requirements.*

*The procedure followed to reach this objective included the model fitting of a set of parameters within the JKSimMet software package in order to set this model as a base case of the following simulations. The next step is the execution of simulations for different ore samples (previously tested using JK Drop Weight Test (JKDWT)) representative of the different extraction stages of the project. The purpose of all this is setting the operating conditions of the SAG and Ball mills.*

*As a result of this project we will find the best operating conditions for every ore type sampled and tested for simulation, to give the maximum throughput, giving a product size with the characteristics established and considering the power requirements.*