

A PROPOSAL FOR THE MAINTENANCE OPTIMIZATION OF MINISTRO HALES COPPER MINING PLANT, BASED ON RELIABILITY ANALYSIS, USING FMECA METHODOLOGY

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ABSTRACT

The end of the copper price supercycle has shown the challenge of being more rigorous in the control of production costs in the mining industry, therefore, new strategies must be explored in order to control and lower the costs associated with the management of physical assets of maintenance. The Minister Hales Division of Codelco has established as a goal being in the first quartile of costs. Thus, by means of reliability analysis, it was carried out a study focused on maintenance cost control. In this way, a maintenance proposal based on reliability has been developed, using the FMECA methodology, and with the support of mathematical and statistic tools, that allow to get more precise information about the condition of machines, as well as, to identify gaps and opportunities for improvement in a prioritized way.

Keywords: Reliability, Maintenance management, RCM, Mining.

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