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**Mining Slurries Transport Systems: Key Design And
Commissioning For a Successful Project**
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Abstract

The mineral slurry facilities are plaintiffs in the hydraulic transport of solids in pulp form, designed for life between 10 and 20 years. Life means continued integrity of the transmission line to meet the commitments of the owner in relation to production and the governing bodies of local authority. During project implementation, before the delivery of facilities for operations, there are two stages during which strengthened and made effective in the characteristics of the pipeline, which guarantee the required life: Engineering and Commissioning.

The experience of commissioning of slurries transport systems (concentrate, tailings and ore) in more than a dozen mining companies in Argentina, Peru and Chile, and knowledge of industrial operations, allow the author to identify key elements of Investment Design Engineering and Commissioning.

The design requires accurate characterization of the slurry to transport, strengthen the foundations of design capacity over the line and specify dimensions, materials, and components of the system, including facilities for implementation and commissioning test analysis, diagnosis and future expansion. Similarly Commissioning allows carrying out tests to verify the industry-wide definitions of engineering capacity (mass flow) with reasonable levels of security according to applicable regulations, and the certainty of expert systems evaluation of operations and the risks of leakage detection. It also consolidates the operation and maintenance procedures which guarantee the integrity of operations and care of the environment and people.

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