

The pipeline transport of high density slurries – a review of past mistakes, lessons learned and current technologies

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Abstract

There is a great deal of misinformation in the industry on pumping high density, viscous slurries. These misconceptions become ‘accepted truths’ as time goes on and at best hinder, and at worst, stop, the implementation of appropriate technology. Unfortunately the root of these misconceptions is often due to experiences gained on poorly understood, designed or implemented systems. Advances in a technology can only be realised by accepting that mistakes of the past can be rectified and learned from. Unfortunately this does not readily happen in an industry that is resistant to change. This paper attempts to redress this by tracing the historical development of high density pumping and why the problems of the past are not necessarily the same problems of today. It is accepted that many of the fundamental problems cannot be resolved, and continued improvements in ore processing will mean that new challenges will arise, however there is a better understanding of how to deal with the issues practically by using the latest developments in pump and pipeline technology.