

Significant Increase in Gold Recovery using Jameson Cell Flotation Technology

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ABSTRACT

Gold losses during flotation often occur within the fines fraction, which has been an ongoing issue that has challenged the gold mining industry. Subsequently, operations will attempt to coarsen up the primary grind to reduce the fine gold (free gold or sulphide gold) generation, resulting from over grinding. Under-grinding can then lead to gold losses in the coarse composite fractions, a consequence of increasing grind size. In essence, you are trading off gold losses in two polar opposite size fractions, arriving at a compromise grind size that makes economic sense. What if there was a simple, well established and industry proven technology that allows you to recover fine gold without generating coarse composites?

While the Jameson Cell technology has been around for 30 years, it has been applied mainly to coal or base metals. Glencore Technology ("GT") has now accumulated significant plant data over the years, including now published gold recovery results, which have shown that the Jameson Cell can achieve up to 15 % - 20 % improvement in fine gold recovery over conventional circuits. The Jameson Cell, with its high contact efficiency, enables excellent bubble-particle contact for fine free particles and has demonstrated for years its exceptional ability to float liberated particles.

Jameson Cells at the head of roughing and cleaning circuits allow you to recover the fine gold lost due to the inability of other flotation technologies to recover this difficult fine fraction.