

Experiences and Applications with Wassara Water Hydraulic Down Hole Drilling Systems

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ABSTRACT

The 4" Wassara water hammer was originally developed by G-Drill AB together with Swedish Mining Company LKAB for their underground long hole production drilling. Sandvik Rock Tools AB is responsible for the introduction of Wassara worldwide.

The system offers a high drilling productivity and energy efficiency until now only available from closed loop oil hydraulic top hammer drilling systems. Other advantages are the improved hole straightness and clean air environment which are both greatly improved.

The hammer is now proven after having drilled more than 2,000,000 meters (6,400,000 feet) at LKAB's two underground mines in the north of Sweden.

This paper reviews the water hammer drilling system, outlines different drilling applications and looks at the advantages of water hammer drilling for underground production drilling.