

PROJECT DESCRIPTION

Mining companies

Sweden / Europe

When starting a new mine, whether it's a open pit or an underground mine, the designer faces many challenges! One of these is the understanding of rock mass conditions and how this affects the choice of mining methods and the mine design at an early stage.

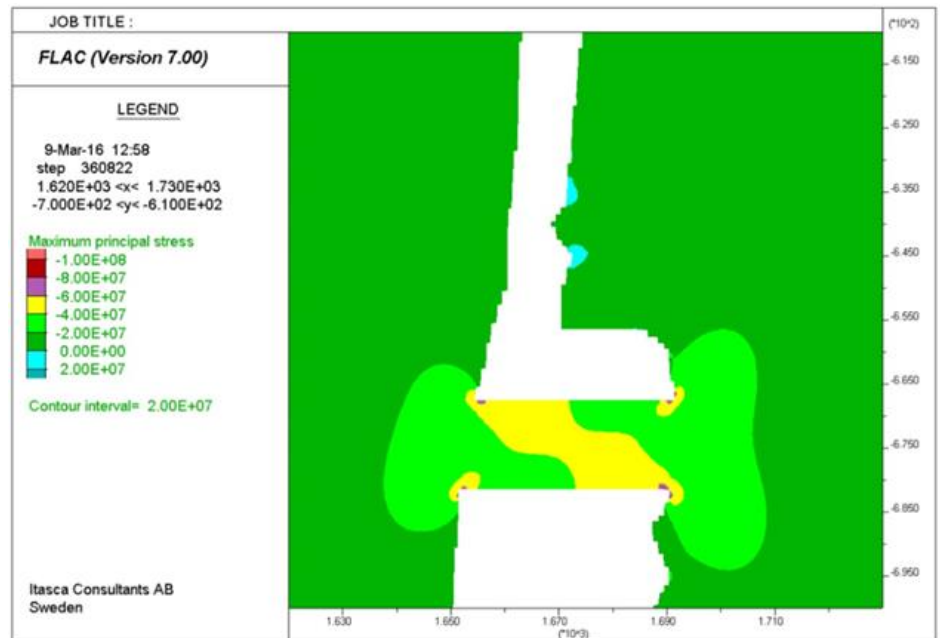


ITASCA'S ROLE

Itasca has carried out a number of studies at conceptual/pre-feasibility level for both open pit and underground mines. The work has included practical core logging, analysis of the stability of the mining stopes and/or pit slopes, stability assessment of infrastructure and its location, support recommendations, etc. Analysis include both analytical and numerical modeling, combined with empirical assessments and our long-term experience.

PROJECT RESULTS

Itasca has developed geomechanical models for the projects including detailed descriptions of the rock mass conditions. This is followed by selection of suitable mining methods, and recommendations on stope and pillar geometries. The need for support and mining sequences has also been quantified, as well as selecting optimum location for mining infrastructure.



Cores to be logged (left) and stresses at a certain mining step for a future underground mine (right)