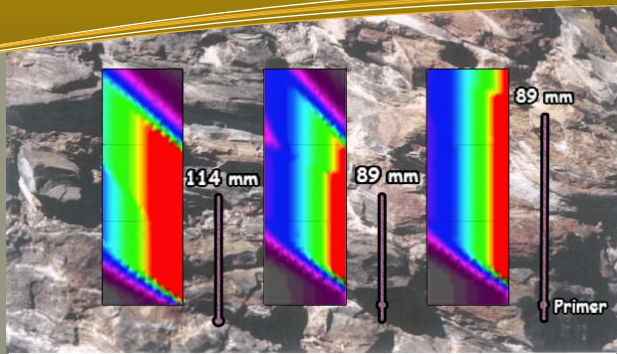


BGPL technical consulting services

- Wall control blasting support
- Vibration control
- Rock shelter protection
- Flyrock risk and control
- Airblast control
- Environmental noise control
- Data analysis



Stress distributions (red level - 300 MPa) for three single blasthole configurations obtained from the BGPL Analytical Model for wave radiation from an explosive column.

Blasthole Stand-off Distance Service

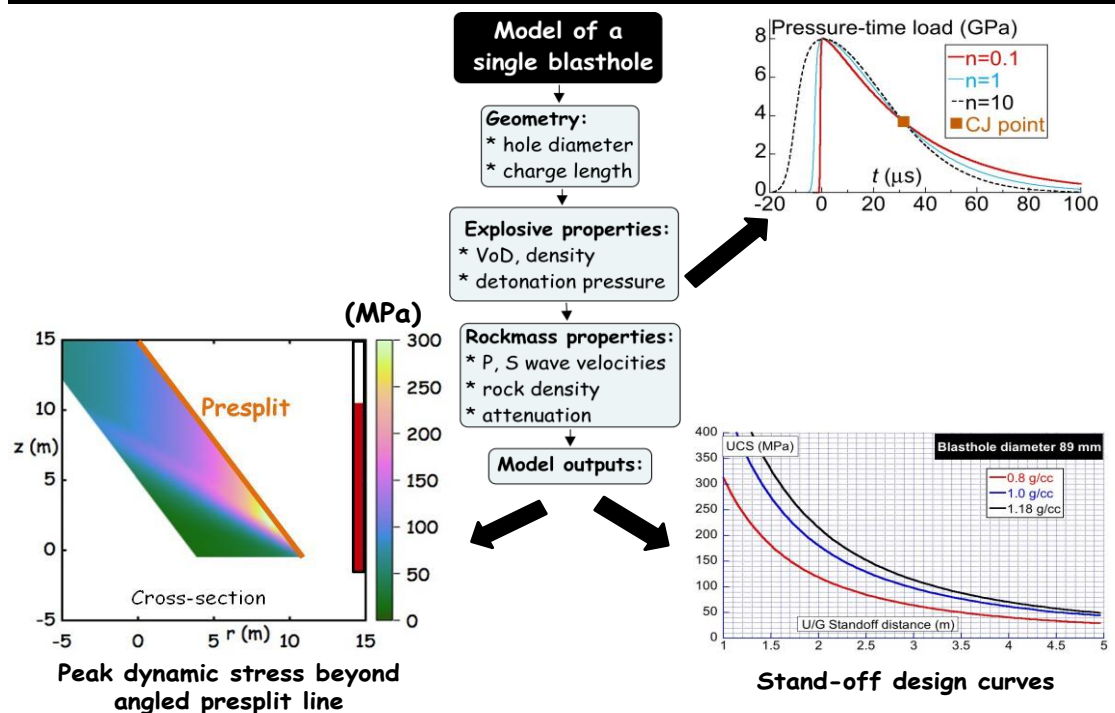
Blasting Geomechanics Pty Ltd (BGPL) offers a service which uses dynamic stress analysis to calculate the stand-off distance for a blasthole. This calculation requires information on the rock mass properties, the charge geometry and the explosive properties. Based on this input our propriety model makes a firm prediction for the stand-off distance to avoid damage to the surrounding rock mass in open pit and underground operations.

Benefits:

- **Customised approach** – Our approach (illustrated below) makes full use of mine site rock mass properties (including UCS), explosives used and site blast geometry.
- **Technical justification** – Our service employees a full analytical dynamic solution that completely eliminates the traditional trial and error approach for setting stand-off distances. This should give an increased level of confidence with regard to minimising rock damage.
- **Economic** – Economic benefits accrue from being able to obtain an optimised stand-off distance (less damage) within a timeframe that is less than the traditional approach. The approach can be used to produce stand-off distance design curves for all site rock mass conditions.

Our approach:

Full dynamic solution for single blasthole: stress, strain & vibration



BGPL Services

Technical consulting
Training & seminars
Management support