

What are your Blast Clearance Zones at your mine site?

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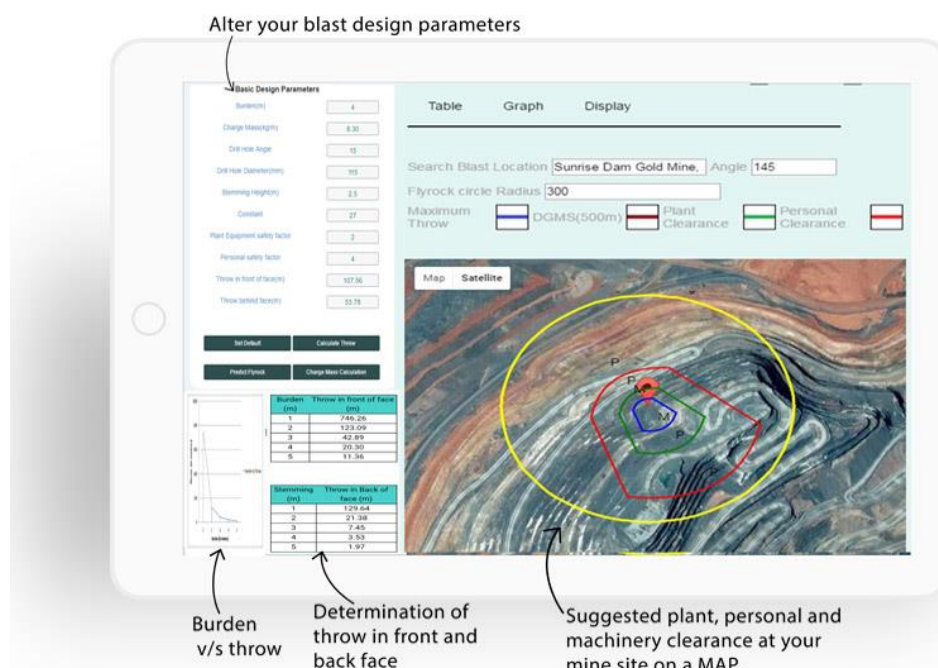
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Flyrock can be a serious problem associated with blasting. Unanticipated flyrock is hazardous to employees and equipment at the mine, quarry or construction site and can result in fatalities, injuries or equipment damage. Also where blasting operations are conducted in proximity to populated areas flyrock may also be a hazard to people, structures, and equipment, not on the blasting site.

It is helpful to have a quick estimation of the probable distance to which an uncontrolled rock (flyrock) can be thrown. With this estimate, safety factors can be used for the removal of equipment and personnel at the time of blasting.

There are many empirical relationships available which provide estimating flyrock distance such as Artificial Neural Network (ANN), Adaptive Neuro Fuzzy Inference System (ANFIS) and Multi-Variate Regression Analysis (MVRA) in published literature.

The MineExcellence Platform Provides a mobile app (android and iPhone) that leverages industry published empirical relationships to calculate blast clearance zone of plant, machinery and equipment. It provides a method by which a blaster or blasting supervisor can alter blasting parameters to increase safety when blasts are conducted. These are based on empirical relationships and hence all due care needs to be taken (as per normal). This simply provides guidance.



Inputs to these are charge mass, burden or stemming height, and a site constant. The output is the distance that rock will be thrown, and this quantification can be used to establish both safe clearance distances and the critical range of burdens and stemming heights where the situation changes rapidly from safe to hazardous.

Safes zones are indicated by appropriate colors on the mobile APP by using safety factors and danger zones for machinery and persons respectively are shown on map at your site. If it is not possible to remove any structure or person, then one can change the charging of holes.

Please feel free to [Schedule a demo](#) of this software if you are interested.