

## **STEMGEL™ SUB T**

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*A NEW INNOVATION IN UNDERGROUND  
BLAST STEMMING TECHNOLOGY.*

## WHAT IS STEMGEL™ SUB T?

STEMGEL™ is a patented hydrogel that can be used to stem underground holes of any type and size, both horizontally or vertically drilled.

STEMGEL™ SUB-T consistently produces more effective and controlled blasting results in Underground applications, improving the safety and efficiency of mining operations.

STEMGEL'S™ unique formula comprises a liquid reagent and specialty polymer blend which, when added to water, forms a solid hydrogel in situ within the blast hole.

STEMGEL™ is an innovation in underground blast stemming and blast control. It's effective, fast and easy to use.

## HOW DOES IT WORK?

STEMGEL™ hydrogel has a large attenuation coefficient and is able to absorb and reflect up to 98% of the blast pressure shockwave and redirect it back into the formation.

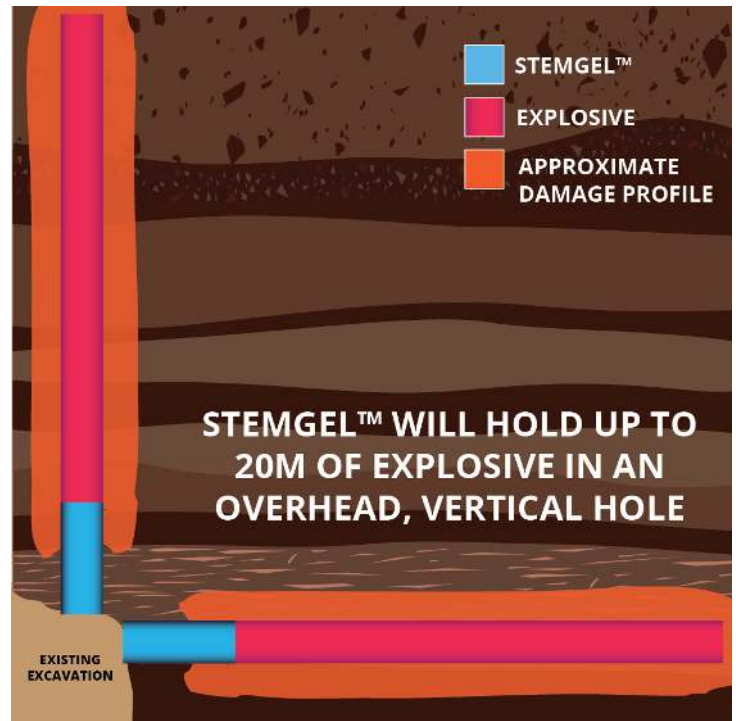
This attenuation and reflection of the blast pressure wave results in an increase in the effectiveness of the blast, through retention and control of the energy, to substantially improve rock microfracturing and breakage.

## SIMPLE AND EASY TO USE

Loading STEMGEL™ is safe, **fast** and **easy**. The process is similar to that of loading emulsion explosives.

Shockwave Gel Technologies have specially designed loading equipment suitable for basket mounting or as a stand alone LV as well as simple handheld application units for smaller jobs.

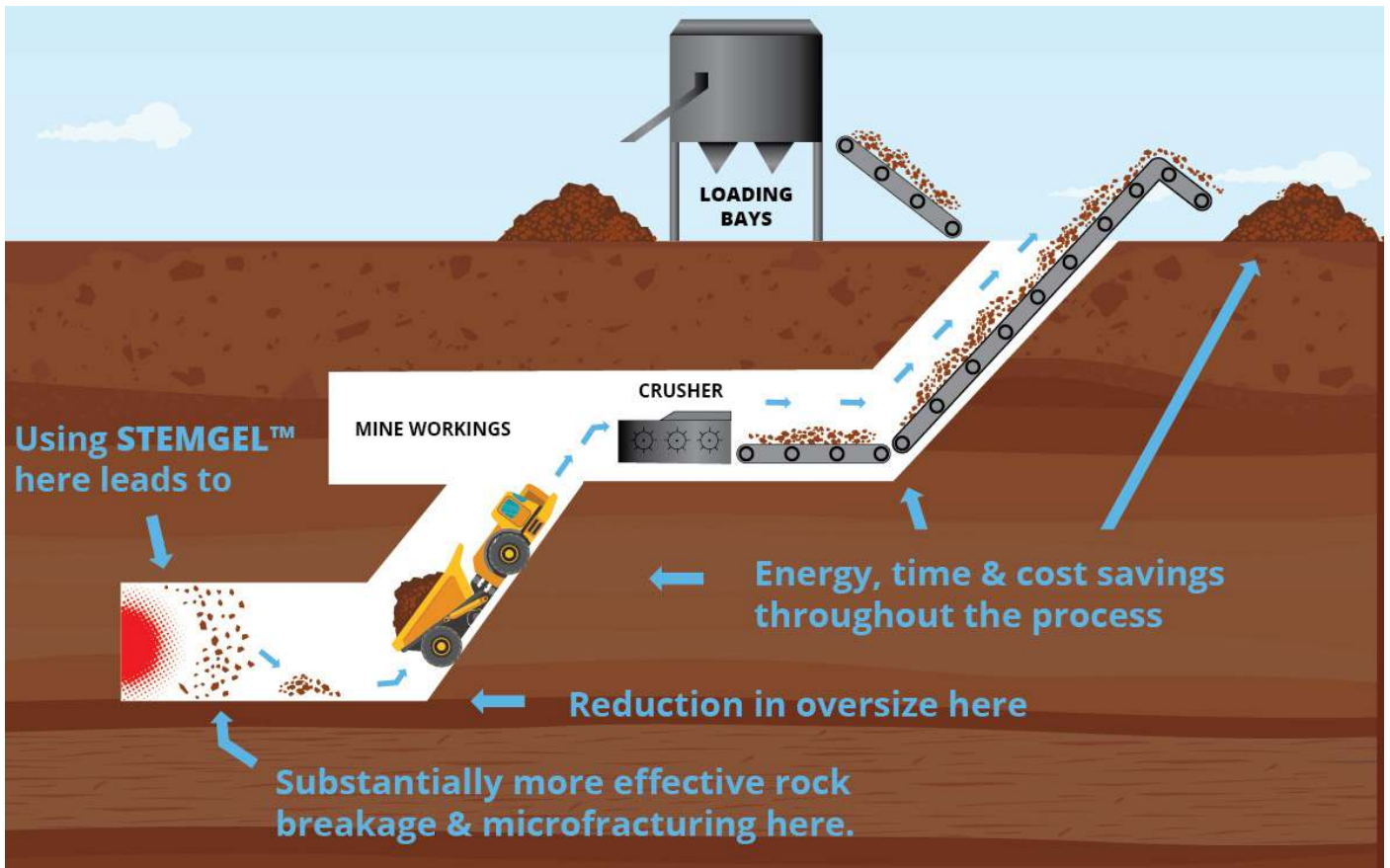
Shockwave Group is able to custom design and construct to your specific needs.



## KEY BENEFITS

- Effective stemming material for both vertical and horizontal blast holes.
- Safe, quick and easy to load.
- Reflection of blast energy reduces risk of residual explosive 'butts.'
- Substantially more effective rock breakage and microfracturing.
- Reduction in oversize material.
- Reduced dust, noise and fume.
- Allows for simple hole re-entry if needed.
- Compatible with all explosives.
- Suitable for pre-stress, vertical splits, uphole and down hole production blasting.
- Non toxic and environmentally safe.

**A REALISTIC SOLUTION TO STEMMING UNDERGROUND BLAST HOLES.**



## OPERATIONAL BENEFITS AND COST SAVINGS

Operational costs for an underground mine start with the blast. Controlled and effective blasting not only **optimizes blasting costs**, it **improves the total cost profile** of the entire mine.

Controlled and increased fragmentation means **easier digging**, **reduced rework**, **lower crushing costs** and improved tons per hour through the processing plant.

