

Stemming IS Everything

There is a lot of planning that goes into a blast: calculations to arrive at proper burden and spacing; borehole depths and sub-drill requirements; and possibly even explosive spacing within the borehole. Even when done repeatedly in the same quarry, there are usually some alterations to be made in the never-ending pursuit of perfection. The implementation of all this planning needs to be carried out by a labour force that will pay attention to the details. If the blast pattern is not drilled correctly, too much or not enough burden or improper spacing, the results of the blast will not be as desired. If boreholes are too deep or too shallow, more adjustment must be made to compensate, that is of course if it has been recorded. There needs to be an expectation between all the labour that work on a site that “close enough” is not acceptable, what is specified in a work plan is what is going to be done.

A blast design can only be properly evaluated if it is implemented accurately

High explosives by their very nature will provide a crushing effect when its supersonic decomposition is initiated, without regard for confinement. Nxburst™ however, works directly in relation to its confinement. As a gas generating product, only when that gas is allowed to build pressure within the borehole will it break rock. The lack of shock-wave is an enjoyable aspect of a deflagration reaction. It allows for sensitive blasting with vibration levels that are almost impossible to achieve with high explosives. It does however make the stemming operation vital, the single most important effort in the proper use of Nxburst™ cartridges. During the Nxburst™ training course, stemming is stressed over and over again as a crucial step, never to be taken lightly or rushed. When stemming is applied in stages, and tamped with a loading pole along the way, you give your blast the best outcome possible. Of course making a poor choice with regards to stemming material is something that cannot be fixed during loading. When holes are wet, the inability to clean out a hole prior to loading cartridges makes things even harder. When conditions are dry and a drill is flushing holes properly, drill cuttings can make a great stemming material. The angular nature of the cuttings help to lock in the stemming when the hole is pressurized at the time of





What's New

ignition. Water however will make the stemming process more difficult, especially if there is soluble material in your stemming material like in drill cuttings.

At Coogar Sales our stemming of choice when things get difficult is basalt shingle grit. It is a hard, fine angular aggregate that will surround the smallest of spaces around the cartridge and does a great job providing reliable confinement.



Since it is not soluble in water, it makes a great stemming material in underwater holes as well. We also manufacture CoogarStem, that same basalt aggregate in a plastic sleeve. CoogarStem allows for easy stemming in horizontal holes where it can be quite difficult to get good confinement. There are many pieces to a successful blast using Nxburst™ and any one of them can cause unfavorable results. Stemming quality is not something that can be measured or quantified. Poor stemming will only show itself after a blast has been initiated and cartridges have “rifled” or ejected leading to poor results, lost time and lost money.

When you only have one opportunity to get it right, leave nothing to chance!

Happy Holidays from Coogar



2020 has been quite a different year in many respects. At this time last year I don't think that anyone would have imagined the lock downs, travel restrictions, all the changes this pandemic has brought with it. Our holiday season will be quite different from past years and although our gatherings may be smaller, we hope your holiday season is fulfilling. There is always much to be grateful for, and we hope you have the ability to spend time with family and friends.

Please don't drink and drive.

Coogar Sales & Services is the proud distributor of Nxburst and the Fragmentor throughout Canada, US and Mexico and has the stock to meet your demands. With our staff having a practical drill and blast experience we can guide you through even the most delicate of jobs safely and effectively helping you and your bottom line.

Give us a call at (866) 762-5835 or visit www.coogarsales.com

