

NEWS THIS MONTH

YOUR SOURCE FOR ALL THINGS ROCK-BREAKING



COMPLACENCY CAN BE DEADLY

Nxburst™ cartridges have some significant advantages over conventional explosives. The potential vibration impacts that are associated with blasting around infrastructure are greatly reduced to almost



non-existent levels. Noxious fumes are virtually eliminated when using Nxburst™ as it is designed to be oxygen-balanced and able to be used underground on shift. Conventional explosive blasters are amazed at how contained the effects of Nxburst™ rock-breaking can be when performed by someone with experience. Due to the mechanisms that Nxburst™ operates under, flyrock is a greatly reduced danger and can be used in applications as extreme as inside buildings.

Over time, the advantages that Nxburst™ offers can seem the norm. If every blast goes well and is well controlled then it can be safe to say that the next one will to.

Thinking the next blast will be the same as the last can be
a dangerous assumption!

In our Nxburst™ training courses we spend a great deal of time talking about flyrock, appropriate loading patterns and types and functions of covering a blast. Preventing flyrock starts with the drilling. A properly



drilled pattern with the appropriate burdens and spacing ensure that each loaded hole has an appropriate amount of rock to move. Too big a burden and the path of least resistance becomes the upward direction which will certainly cause issues. Drilling a hole that is angled towards the free face will result in too little burden, coupled with the angle itself directing rock up and away from the borehole will always result in flyrock. Assuming that you have designed a good pattern, drilled your holes at 90° correctly, and loaded with the proper cartridges, the rock still holds secrets that may cause issues.

This is where blasting mats, conveyor belting, sand or other aggregate fill, even geotextile fabric can provide the additional support in containing a blast. Although the idea of applying cover or matting to a blast may seem simple, to a new blaster with little experience it can be tricky. Covering a blast with an inappropriate material can actually cause more issues. The idea of applying covering is to catch and contain both the small and potentially larger rock but sometimes even the stemming itself. The key however is to let the energy out, thereby not creating a projectile that will itself be thrown. A sheet of steel is a great example of something that sounds like perfect covering, but in reality it will actually hold in the energy until it is thrown as well.



Before any holes are drilled or loaded, a risk assessment should be done. This allows the blaster to think and then account for all the potential issues that may arise on site. Once the cover material has been decided, the amount of cover available will determine how many holes can be shot in a single event. The great number of holes that can be fired per round will greatly influence the rock excavation portion of the project. Complacency and/or taking risks can have fatal consequences. When in doubt, trust your gut, increase your clearance area and add more cover!