# What's New

#### Nxburst in Pennsylvania and New York City



The team at Coogar Sales has been on the move this month. Projects in the heart of Manhattan, New York City and an Nxburst demonstration in Bethlehem Pennsylvania have had us south of the border. The high frequency, low ppv characteristics of Nxburst<sup>™</sup> make it the perfect product for rock and concrete breaking in sensitive applications ranging from inside a building to downtown Manhattan. You know what ol'blue eyes had to say about New York City, If you can make it there, you can make it anywhere!

#### **Rock Breaking Solutions does it again!**





We love to see Nxburst<sup>™</sup> in action, even when it is someone else doing to work. Our counterpart in Australia made headlines this month when a landslide left two boulders sitting on the road. With one of the boulders at approximately 80 tons, they needed to be broken up. As usual Rock Breaking Solutions did a bang-up job (pun intended) and got the road cleared. You can see the videos here:

https://www.instagram.com/p/B8oAS2FF5hJ/ and https://www.instagram.com/p/B8n\_o5OlJWP/











## What's New

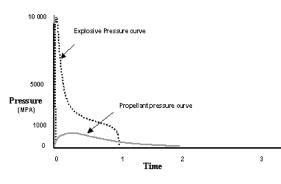
### **Deflagration vs. Detonation**

One of the most important features distinguishing Nxburst<sup>M</sup> and Fragmentor<sup>M</sup> from high explosives is that explosives detonate while the propellant used in a Nxburst<sup>M</sup> and Fragmentor<sup>M</sup> cartridges deflagrates.

The effects of detonations are very different from those of deflagrations. The supersonic reaction speed of detonation develops a shock wave in the explosive, which triggers the propagating reaction. The propagation of the shock wave is accompanied by a chemical reaction that furnishes energy to sustain the shock wave advance in a stable manner, followed by the formation of the final gaseous products and their associated pressures at some time later. Deflagration produces no shock wave and only those pressures produced by the formation of gaseous products are present.

The rock to which an explosive detonation is applied will experience a supersonic blow from the detonation front's pressure pulse followed quickly by a prompt release of pressure and then followed immediately by a build-up of pressure imparted by the gaseous products of the explosion, which will be applied in a more or less sustained manner. Deflagration produces only the last effect as it does not produce a shock wave.

In general, the higher the VOD of the explosive, the greater the shock wave produced,



Pressure over Time - High Explosives vs. Nxburst $\ensuremath{\sc s}$ 

which is responsible for the shattering action of the blast. In high VOD explosives much of the energy is disseminated in the detonation shock wave whereas in propellants most of the energy is used in the heaving action produced by the gaseous products pressurizing the drill hole. This allows the blaster to break rock in a more controlled manner, safely and efficiently. The lack of shockwave is reflected in the ability of both Nxburst<sup>™</sup> and the Fragmentor<sup>™</sup> to break rock without the damage of high-explosives.

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





