

NEWS THIS MONTH

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THERE'S NO FOOLING AROUND WITH THE NEW 42



The newest and largest editions to the 42mm Nxburst cartridge line was field tested last week with spectacular results. Both the 50042 and 65042 cartridges were tested in Huntsville Ontario, at an excavation project already underway. With the customer currently using the 24042 cartridges, we were all keen to see how the increase in cartridge size would impact the project. The big test would be how the single 50042 and 65042 would perform directly compared to holes loaded with 2 and 3 24042's. Based on the Nxburst Physical Properties sheet a 24042 cartridge in in-situ rock should result in a minimum of 1 cartridge per cubic yard. The plan for the larger cartridges was to shoot two shots, each a single row. The first shot having a 4' burden and spacing with 6' deep holes. The second shot would be same 4' burden and spacing but with holes at a 7.5' depth. Based on these measurements the blast pattern worked out to 54 cubic yards. The total cartridges used in the first row of 6' holes were 2.98Kg, (2x24042 and 5x50042) The second row consisted of 5 holes at 7.5' deep with a single 65042 cartridge in each hole working out to 3.25Kg.

Blast No.	Hole No.	Hole Depth	Burden	Spacing	Delay No.	No. of Sticks	Resistance
01	1	72"	48"	48"	0	2	24042x2
	2	72"	48"	48"	0	1	50042
	3	72"	48"	48"	0	1	50042
	4	72"	48"	48"	0	1	50042
	5	72"	48"	48"	0	1	50042
	6	72"	48"	48"	0	1	50042
	7	72"	48"	48"	0	1	50042

Date: 03:20
 Time: 14:00
 Nxburst: 50042
 Grade:
 Size:
 Method of Firing: ELECTRIC
 Power Line No.:
 Blasting Machine: HB-55
 Was Circuit Tested? Yes No
 Type of Rock: GRANITE
 Weather Conditions: Clear Overcast
 Directions of Wind: N/A
 Distance to nearest building: 50 METRES
 Were Mats Used? Yes No
 Remarks: GOOD FRAG. NO FLYBACK
 Blaster: _____

● = 24042 x 2

Blast No.	Hole No.	Hole Depth	Burden	Spacing	Delay No.	No. of Sticks	Resistance
02	1	90"	48"	48"	0	1	2
	2	90"	48"	48"	0	1	2
	3	90"	48"	48"	0	1	2
	4	90"	48"	48"	0	1	2
	5	90"	48"	48"	0	1	2

Date: 03:20
 Time: 15:00
 Nxburst: 65042
 Grade:
 Size:
 Method of Firing: ELECTRIC
 Power Line No.:
 Blasting Machine: HB-55
 Was Circuit Tested? Yes No
 Type of Rock: GRANITE
 Weather Conditions: Clear Overcast
 Directions of Wind: N/A
 Distance to nearest building: 50 METRES
 Were Mats Used? Yes No
 Remarks: GOOD FRAG. NO FLYBACK
 Blaster: _____

The blast plans shown here layout each blast with the hole depths, pattern and loading pattern. A total volume for the entire 2 blasts equate to 54 cubic yards. The total cartridge volume equal 6.23 Kg. between both blasts.

$$6,230 \text{ grams} / 54 \text{ cubic yards} = 115 \text{ grams/cubic yard}$$

As mentioned earlier, the previous largest cartridge in the 42mm range had a powder factor of 313 grams per cubic yard. These largest 50042 and 65042 cartridges in this blast have proven to not only be effective, these results show an exponential improvement in production. With all this production there also comes a cost savings in both time and material. A single 65042 cartridge costs less than multiple 24042's, is faster to load and simpler to wire and test. A key component of breaking rock with Nxburst is the right size cartridge in the right size hole, with correct burdens and spacing. These larger cartridges increase to options a blaster will have on any project. We are always happy to help with questions, design and when needed, on-site consulting. Give us a call and we would be happy to see if these new 42mm cartridges will work in your application.