



# BEST PRACTICE APPLICATIONS FOR SENATEL™ POWERSPLIT™

Designed to create smooth walls and ideal for pre-split and trim blasting.

Maintaining the integrity of walls is essential to the safe operation of opencut quarries, mines and construction sites. With high velocity of detonation (VoD) and lower energy due to decoupling of the charge, this advanced packaged explosive product minimises wall damage leaving a smooth profile. Senatel™ Powersplit™ is internally traced with a 10gm detonating cord to deliver reliable initiation and high VoD and a length of rope integral to the product for inhole product support.

## THE BLAST VALUE IS ACHIEVED AS A RESULT OF:



Simple and rapid deployment on bench with integral rope support



Reliable initiation due to the centre traced detonation cord



Reduce wall damage due to blasting

[orica.com](http://orica.com)

**Senatel Powersplit** 

 **ORICA**

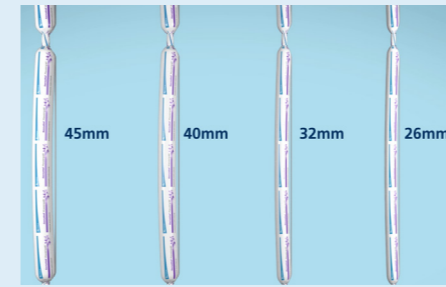


# BEST PRACTICE PROCESS

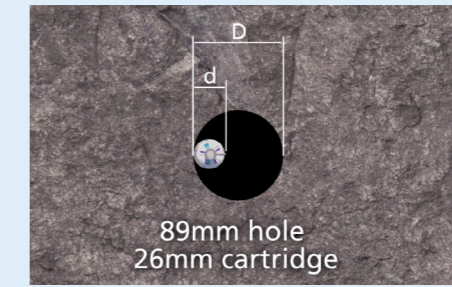
- 1.0 - Charging techniques
- 2.0 - Tie up
- 3.0 - Joining Senatel™ Powersplit™
- 4.0 - Joining detonating cord
- 5.0 - Alternative priming techniques



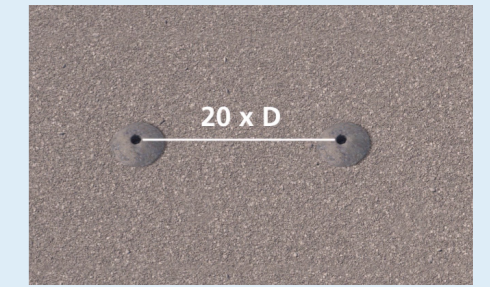
## GENERAL



- Senatel™ Powersplit™ cartridges come in a range of diameters.



- Recommended coupling ratio  $d2/D2 = 0.1$



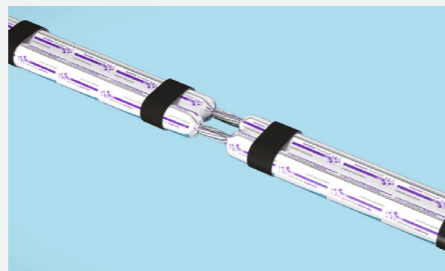
- Recommended hole spacing: 12 – 20 times diameter depending on rock type. Damage extends more around wet holes.
- Powder factor: Presplit of ranges from 0.5 - 1.0kg/m<sup>2</sup>

# BEST PRACTICE APPLICATIONS

## 1.0 - CHARGING TECHNIQUES



- 1.1** Check depth of holes prior to loading.



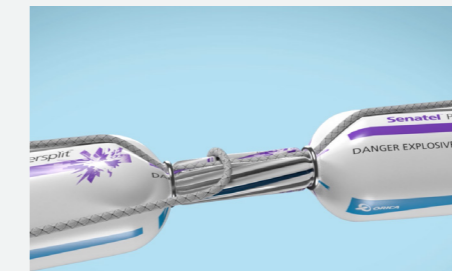
- 1.2** Double over last 2 cartridges and tape together.



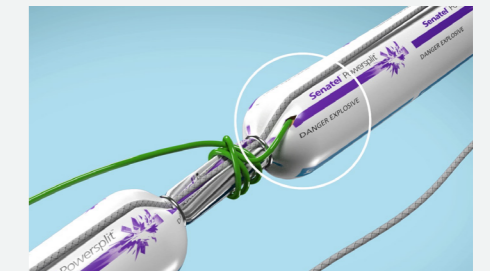
- 1.3** Lower cartridges to the bottom of the hole. Pull up the length equivalent to uncharged collar length.



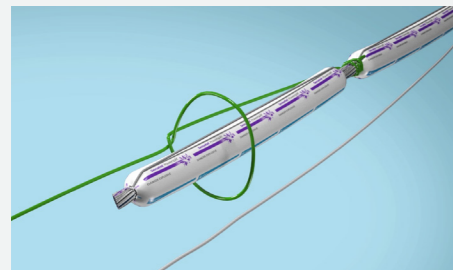
- 1.4** Cut off excess cartridges.



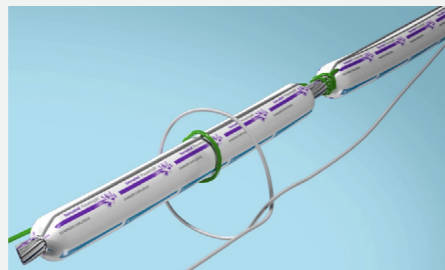
- 1.5** Tie rope between second and third cartridge from the top.



- 1.6** Tie detonating cord below first cartridge. Insert tail of detonating cord into the cartridge.



- 1.7** Attach the detonating cord with a half-hitch around the top cartridge as shown.



- 1.8** Following completion of the detonating cord half hitch in an independent connection, half hitch rope around top of the first cartridge. Suggest a couple of half hitches.



- 1.9** Lower the charge using the rope. Touch hole bottom. Suspend the charge using the dowel and rope. Ensure rope takes weight and not detonating cord.



- 1.10** Cut downline to 300mm tail out of the hole.



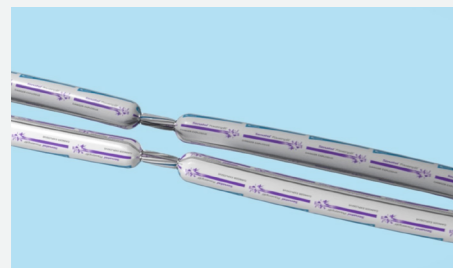
- 2.1** Layout trunkline. Based on this product's compatibility tables, Cordtex™ 10 or 10P (as a receptor) is compatible with a 5gm cord.



- 2.2** Tie downline to trunkline. When using only one trunkline, initiate from both ends.

## 2.0 - TIE UP

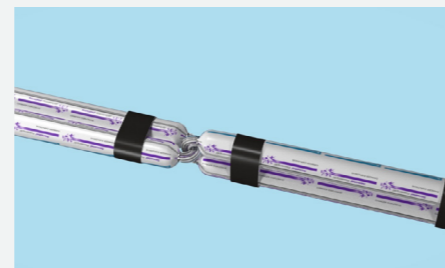
## 3.0 - JOINING POWERSPLIT™ (CROSSOVER METHOD)



- 3.1** Lay cartridges next to each other.

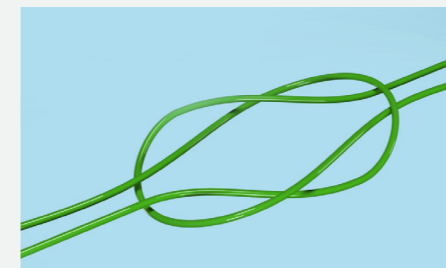


- 3.2** Twist the two end of the cartridges around one another.

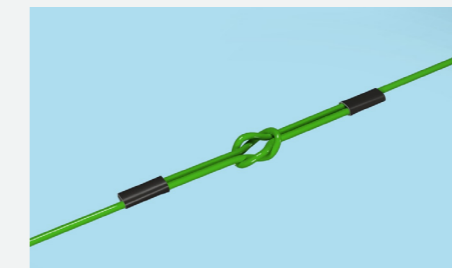


- 3.3** Tape cartridges together.

## 4.0 - JOINING DETONATING CORD



- 4.1** Cord using a reef knot.



- 4.2** Tape ends of secured reef knot.

## 5.0 - ALTERNATE PRIMING TECHNIQUES



- 5.1** Alternate option uses an electronic detonator in toe charge.



Presplit wall showing clean half-barrels.



The application guide is also relevant to the use of Senatel™ Pyrosplit™ in reactive ground. To learn more about Senatel™ Powersplit™, please contact [orica.com/senatel-powersplit](https://orica.com/senatel-powersplit)

Disclaimer: Senatel™ Powersplit™ varies slightly in application across different regions. Please reach out to your Orica representative to assist in the accurate use and application of the product.

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