

Decline Design for Underground Coal



but inside it. The remaining portions of the pattern were designed and timed to shoot towards this opening. Furthermore, the variations in the depth required four (4) different hole patterns to be used in the overall pattern. Due to the variations in the hole patterns and the necessity to keep appropriate movement of the rock throughout the pattern, it was necessary to adjust the hole timing as the pattern changed.

Due to the complexity of the timing that was required, the ViewShot™ software was employed to design the hole timing. By using this software, the file created in ViewShot can be downloaded to the shot box for programming the detonators on the blast day.

Results

ALL FOUR CRITERIA MET

The blast design provided to the customer met all the criteria provided by employing permissible explosives and electronic detonators. In addition, the total duration of the designed blast is under the limit established by MSHA. The blast design itself was developed to be easy to drill, load, and time.