

CENTER ROCK, INC. – PRODUCT INNOVATION LEADS TO IMPROVED PRODUCTIVITY



For many years, Center Rock Inc. has been the leader in the manufacture and application of the multi-hammer canister drill (LP Drill). From its use in the 2010 Chilean Mine Rescue, when 33 miners were rescued through the 26" (66cm) hole drilled by a Center Rock LP, to horizontal push-pull applications, the Center Rock LP drills in any inclination from vertical to horizontal for mine rescue, burn holes, utility and ventilation shafts.

In this particular mining application, the end result was to have a 110' (33.53m) X 24" (61cm) burn hole connecting to the stope below at 19 degrees off vertical. Once the 24" (61cm) burn hole was completed, 4.5" (11.43cm) shot holes were drilled around the perimeter and blasted in 15' (4.57m) lifts from the bottom up. The 24" (61cm) diameter burn hole focused the energy from the blast inward, away from supporting walls.

Historically, these type of holes were drilled using a competitive hole opener system that was slower and more costly to operate. The following is the "new" solution provided by Center Rock that was mounted on the mine drill rig using 5" (12.7cm) OD drill rods, 4' (1.22m) in length, with mine air & booster.

First, a 10" (25.4cm) pilot hole was drilled with a Center Rock RF88 hammer, a 9.5" (24.13cm) over-hammer stabilizer, and a 10" (25.4cm) bit. In the past, they had drilled these type of holes in 3 steps; drill a 6.5" (16.51cm) hole, ream to an 8" (20.32cm) hole, and finally ream to a 10" (25.4cm) hole. So, the Center Rock solution completed the hole in one pass compared to three passes for the competitive system, increasing efficiency, productivity, saving time & money, and most importantly enhancing safety due to less rod handling.

...most impressed with the "penetration rate, ease of maintenance, and Center Rock on-site technical support."

-James Kirkey, Operations Manager
Major Drilling

Upon completion of the 10" (25.4cm) single pass hole, the drill string was retracted and the Center Rock 24" (61cm) X 10" (25.4cm) LP Canister Hole Opener was employed. The overburden consisted of 2'-3' (0.61m-0.91m) of loose material with large rocks as well. The top of the bedrock was inconsistent and standing on an angle. Once the top of the hole was established, the drilling went very smoothly and the Center Rock LP set a new record at the mine of 56' (17.07m) in a single shift.

Major Drilling has continued to utilize the tool and has successfully completed multiple burn holes. And, when asked about the Center Rock Mining LP, James Kirkey, Operations Manager for Major Drilling in Canada stated that he was most impressed with the "penetration rate, ease of maintenance, and Center Rock on-site technical support."

You too can enjoy these productivity and safety gains by using the Center Rock Mining LP Drilling Solution.....call Center Rock today!

