



# TERRAIN FOR DRILLING

## IMPROVE DRILLING ACCURACY AND REFINE FUTURE DRILL PLANS.

Effective mining starts with accurate drilling. That means drilling every hole precisely to plan, at the proper angle and the correct depth. Cat® MineStar Terrain for drilling provides precision guidance that helps operators complete patterns accurately and productively. It pays other dividends, as well, by improving safety, reducing costs and recording data about drilled stratification to aid in planning blasts and improving fragmentation.

### BENEFITS

- » Maximizes blasting efficiency by allowing operators to execute patterns more accurately.
- » Increases hold placement and angle accuracy.
- » Reduces over- and under-drilling of holes on a pattern by drilling to an elevation, not a depth.
- » Improves production efficiency and reduces the amount of survey work by creating hole locations through digital drill plans.
- » Offers a scalable solution for multiple drill size classes.
- » Enables monitoring of operator efficiency and machine utilization for optimized production.
- » Enhances safety by enabling avoidance zones in hazardous areas.
- » Controls costs by helping mines achieve proper fragmentation with less explosive material.
- » Shares data with other drills on the location depth and current status of each hole.
- » Tracks drill consumables for economical planned replacement based on actual usage.
- » Alerts operators to existing bootlegs and pipe-in-hole propel engagement.
- » Communicates seamlessly with Cat MineStar™ and other mine management systems.
- » Provides live strata information to the operator and sends the information to the office.
- » Provides robust reporting that outlines drill productivity, availability, utilization, and compliance to plan.

### DIFFERENTIATORS

- » Largest range of models, including competitive OEMs
- » Increases drilling to plan accuracy
- » Drill tool monitoring
- » Measured While Drilling (MWD) performance and strata information

### SUCCESS STORIES

- » 5.9 percent reduction in total drilled meters per year (~\$1.52M savings)
- » Over 1,200 total drill hour reduction (~\$200K savings)
- » Reduced total drilled meters led to a reduction in consumables (~\$210K savings)
- » Downstream improvements led to a 5 percent increase in rope shovel bucket fill factor (~\$550K savings)