AUTOMATED AND ACCURATE DRILLING

Focus within the mining industry is increasingly moving towards the logical next step: advancing the use of automation. Sandvik’s automation offering for rotary drill rigs is fully designed and integrated into the equipment to improve safety and efficiency in drilling operations. The solution allows mining companies to enhance their operations, with the help of technology, through reducing risk to personnel, increasing drilling accuracy and improving the overall mining process.

Sandvik is moving to the next generation of surface drilling with its i-series drills that feature the proven Sandvik intelligent controls CAN bus system. In i-series units, all machine functions are controlled by the intelligent control system which enables more accurate functions, less machine wear and higher availability. This common platform across all Sandvik i-series equipment provides customers with advanced diagnostics to minimize time to repair, plus scalable automation that can be added at a later date. Sandvik already has a large fleet of several hundred pieces of equipment, all running on its intelligent control system, out in the market, driving our customers’ profitability today.

Automated drill functions, such as auto-level, improve machine set up accuracy, improve availability and extend machine life from less frame stress. The easy-to-use GPS-based 3D navigation system provides hole accuracy to within ten centimeters, both for hole location and drilling elevation, giving improved bench quality. The system also removes the need for surveying and hole marking, minimizing risk of human errors and significantly improving drilling results from improved hole accuracy.

Auto-drill provides more consistent control of drilling parameters, with less wear on the drill feed, drill string, and rotation systems. More consistent drilling performance and more predictable drilling process translates into improved drilling results, which means better productivity and more holes in less time and subsequently improved efficiency in downstream processes. Another benefit of the automated features is that less-experienced operators can now drill at a more predictable level and achieve consistent drilling results.

IMPROVED OPERATOR SAFETY

Based on proven technology, AutoMine® Surface Drilling enables mines to operate drill rigs from a remote operation center, or from the Sandvik command trailer. The system communicates directly to the drill when in line of sight, or via a communication network. The solution improves working conditions and safety for the operator and keeps personnel out of hazardous areas. One operator can operate up to three drill rig units.
DATA DRIVEN PRODUCTIVITY

Transparency around resource performance and production management via a convenient information management system is essential in mining process optimization. Reports provide real-time visibility of the drilling process and enable more efficient operation and faster decision-making.

With OptiMine® drill plan management and detailed reporting capabilities, drill plans are transferred to the drill. The actual real-time drilling data, after each completed hole, is immediately available in the command center, to be utilized in production control systems.

Measure while drilling (MWD) provides real-time insight into the rock mass whilst drilling, which enables informed, proactive operational decisions and aids in reducing costs and improving productivity. MWD enables optimized blast design and drill plan adjustments. Immediate access to data gives tools to optimize your drilling and blasting operations.

SanRemo® production reports, delivered via satellite communications, supply you with aggregated information on production, performance and equipment usage level. This system is popular with contractors who move equipment more frequently.

BACKED BY SANDVIK

As a leading supplier of mining automation solutions globally, Sandvik provides the right technology for your mining needs today and tomorrow. The Sandvik automation offering is an ideal solution for customers looking for modern technology to improve mining profitability, safety and efficiency.

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