



THE DIFFERENCE IS ELECTRIFYING

SANDVIK DD422iE





SANDVIK

EMISSION-FREE UNDERGROUND DEVELOPMENT

Awareness is growing about the potential health impacts of diesel particulate matter (DPM) and other underground engine emissions that also often dictate high mine ventilation costs. As regulations become stricter, you need a cleaner-energy drilling solution to address emissions challenges.

Sandvik DD422iE is the mining industry's first highly-automatic development jumbo with an electric driveline system, engineered to meet your needs for improved safety, increased productivity and reduced emissions. Sandvik DD422iE uses electric battery power instead of a diesel engine to eliminate emissions during tramming. Thanks to its revolutionary electric driveline system, our latest highly-automatic mining jumbo consumes no fuel and generates less heat and noise than conventional drivelines. The result is safer, healthier and more productive development drilling in your mine.

Sandvik DD422iE will help you to achieve optimum tunnel profile and dimensions in your underground development. Sandvik DD422iE performs precise, repeatable drilling procedures that can significantly reduce the amount of waste material produced, making your mining and development process more cost-efficient.

We've engineered additional innovative features into Sandvik DD422iE that help you drill more safely, efficiently and precisely. An optional 3D scanning system automatically scans overbreak and underbreak, saving you valuable setup time each drilling cycle and helping you develop more meters every month. Sandvik DD422iE can also be equipped with a less-hose boom that uses 55 percent less hydraulic hosing than its diesel predecessor, reducing a leading cause of downtime.



up to 20%

improved drilling performance through active power compensation*

55%

less hydraulic hosing than its predecessors

100%

reduced emissions compared to conventional diesel drills

* Test results and calculations are to be considered as results reached under certain and controlled test conditions. These test results and calculations should not be treated as specifications and Sandvik does not guarantee, warrant or represent the outcome of test results or calculations in any or all circumstances.



ELECTRIC

By using electric energy from an onboard battery during tramming, Sandvik DD422iE produces zero emissions while maneuvering between headings. This improves health and safety for miners working underground, makes it easier to comply with increasingly strict emissions regulations and can potentially even cut costly ventilation requirements while also reducing associated diesel logistics and maintenance expenses.

The energy-efficient electric motor is quieter, generates less heat and emits no harmful DPM, NO_x and CO₂ particulates. An intelligent power management system helps improve drilling productivity even when underground electric power is limited. Coupled with its ability to charge its battery during drilling, Sandvik DD422iE maximizes utilization of mine electrical network.

The battery will even recharge as Sandvik DD422iE is tramming downhill by using energy generated by the braking system, so your jumbo will always be as charged as possible. Enabled with a multi-voltage compliant universal electric system that gives you freedom to move your drill from one mine site to another, the jumbo easily operates in different networks ranging from 380V – 1,000V and both 50Hz and 60Hz.

MORE UPTIME

Don't let hose wear and tear stall your development drilling. Sandvik DD422iE is available with a less-hose boom that uses 55 percent less hosing than its predecessor.

Hydraulic hoses get chafed on rock faces and wear out quickly. Using a simpler, standardized structure, our less-hose boom option reduces the length of hosing from 240 to 110 meters so you reduce your exposure to potential damage. Fewer failures mean more uptime and fewer maintenance hours.

The boom offers a single, flexible component concept where the same spare part fits any boom movement. Coupled with excellent spare parts availability, you'll spend less time on hose repairs.

Our new less-hose boom is also available as a retrofit package for existing DD422i units, so you can take advantage of all the benefits without investing in a whole new rig.

AUTOMATIC

As mines continue to develop deeper while commodity prices remain unstable, avoiding overbreak during face drilling becomes even more crucial. Automatic features we've engineered into Sandvik DD422iE, such as 3D scanning, remote monitoring and a wide range of automation options, increase your drilling precision and productivity.

Optional 3D scanning is one of several innovative technologies available for Sandvik DD422iE. It automatically scans overbreak and underbreak to optimize your drilling accuracy and save you valuable time during the drilling cycle, helping you develop more meters every month.

This simple automatic scanning process uses point cloud scanning technology to determine rig location, saving you valuable setup time each drilling cycle. It measures the profiles of the roof and walls around the rig, comparing them with previous scans in its memory to locate a drilling location with perfect precision.

Just press a button the automated rig navigation will start immediately.

Performing a continuous overbreak and underbreak analysis, the scanning unit helps optimize the drilling and blasting cycle, helping to produce an accurate profile. You'll excavate your tunnel or drift as close to planned layout and size as possible.

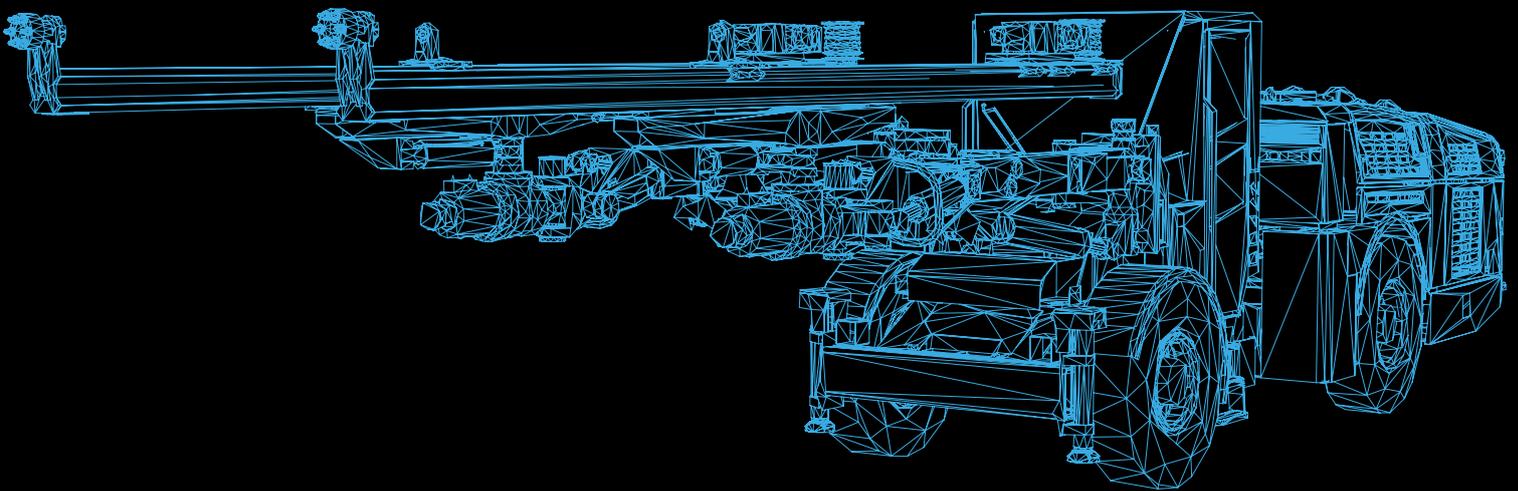
Using smart iteration cycles, our 3D scanning technology helps analyze the quality of your underground development work so you can improve tunnel profile for the next round.

The scanning technology works with iSURE®, our integrated solution to combine tunnel line, theoretical profile design, drill plan design and data collection analysis. iSURE helps further optimize your drilling and blasting process by assisting to find optimum spacing and location for your holes in the drill pattern, enabling a more efficient drilling and blasting cycle.

We've engineered Sandvik DD422iE for full compatibility with Sandvik AutoMine® Drilling and Sandvik OptiMine® Remote Monitoring systems. When you need automated or teleremote drilling and information management functions, Sandvik DD422iE is your solution. The jumbo is available in three automation configurations that can further help you reduce unnecessary waste rock excavation and save time, delivering greatly increased productivity while significantly reducing waste-handling costs.

10 WAYS TO ADD VALUE TO YOUR OPERATION WITH SANDVIK DD422iE

- Eliminate emissions to improve your underground working environment
- Reduce maintenance and fuel logistics costs, and potentially even ventilation requirements
- Maximize productivity with active power compensation
- Recharge battery during drilling so you don't pause production
- Develop more meters with 3D scanning technology
- Improve operator ergonomics through increased visibility and reduced noise
- Save valuable setup time during each drilling cycle
- Spend less time on hose repairs
- Optimize drilling by continuously analyzing overbreak and underbreak
- Operate virtually anywhere with multi-voltage compliant system



KEY SPECIFICATIONS

Height	3.05 m / 3.15 m
Width	2.50 m
Weight	27,500 kg
Drilling coverage	10.3 m x 6.6 m
Powerpack	1 x 160 kW
Rock drill	Sandvik RD525
Control system	Sandvik Intelligent Control System Architecture (SICA)
Automation levels	Silver/Gold/Platinum

SANDVIK 365. PARTS AND SERVICE YOU CAN COUNT ON.

People tell you stories about quality, commitment and innovation. But for the real story, take a close look at the numbers. In an industry where an hour of downtime can cost thousands, Sandvik parts and services can save you millions, with round-the-clock service, qualified engineers and genuine parts on demand.

When you can predict your productivity, you predict profitability. Sandvik 365 is about optimizing performance every hour, 365 days a year. We not only supply industry-leading mining equipment, our comprehensive aftermarket offering includes service solutions to add even more value to your operation, and genuine parts to extend your equipment lifetime.

Our Sandvik 365 offer for Sandvik DD422iE includes maintenance agreements, battery rentals and the highest-quality OEM parts, rock tools and other consumables.



