



# DRILL INTO AUTOMATION REVEAL YOUR POTENTIAL

AUTOMINE® SURFACE DRILLING FOR BOOM DRILLS



# AUTOMATED SURFACE DRILLING OPERATION MAXIMIZING SAFETY AND PRODUCTIVITY

Sandvik AutoMine® Surface Drilling for Boom Drills is an automation system for one or multiple Sandvik iSeries drill rigs remote operation. It improves the safety and productivity of surface drilling operations. With AutoMine® Surface Drilling one operator can control multiple rigs remotely from a safe, comfortable location in line-of-sight or a control room miles away.



## ONE OPERATOR – MULTIPLE RIGS

One operator can control multiple drill rigs simultaneously, either line-of-sight setup from a van or trailer or from a control room located on the mine site or even in another city. This reduces exposure to noise, dust, vibration, and exposure to hazardous environments. The operator monitors the fleet and can easily switch to control the rig requiring detailed attention.

## MINIMIZE ERRORS, MAXIMIZE SAFETY

The onboard automation functions of Sandvik's iSeries surface boom drill rigs form the basis for the remote operation and minimize the risk of human errors.

The AutoMine® system and intelligent rig control system ensure accurate and efficient drilling operations. The intelligent system helps to use the drill rig's full potential in ways it's designed to be used. Operator safety is of paramount importance to all mining operations. AutoMine® includes a safety system designed in accordance with international functional safety standards. The AutoMine® product group is operating for more than decades without any Lost Time Injuries.



# INTELLIGENT PERFORMANCE

Multiple camera views with high-quality audio, and a range of automated features such as accurate positioning, automatic alignment, autonomous drilling and automatic pipe handling greatly improve drilling performance. The AutoMine® system can expand from line-of-sight setup to control room operation miles away.

## MULTIPLE RIGS IN AN INTEGRATED FLEET VIEW

AutoMine® fleet view shows all connected rigs and makes it easy for the operator to switch control between machines on the large touch screen. With one glance the operator can see the essential info on each rig.

## MULTIPLE CAMERA VIEWS AND AUDIO

Operators get a complete view of the drilling operation through multiple cameras mounted in each critical spot on the rig. The drilling main camera can be controlled remotely via shortcuts or a dedicated joystick to focus on even the smallest details. Drilling performance is further improved through high-quality audio.

## SCALABLE NETWORKS

AutoMine® comes standard with a simple and reliable stand-alone network or can be integrated to a mine's existing network solution.



## AUTOMATED DRILLING OPERATION

Intelligent Sandvik drill rigs equipped with AutoMine® come with a range of onboard automation features and options to ensure optimal drill performance and minimize the possibility of errors.

- |   |                                    |  |
|---|------------------------------------|--|
| ✓ | TIM3D DRILL NAVIGATION             | TIM3D drill navigation system significantly improves drilling accuracy, efficiency and productivity.               |
| ✓ | FEED AUTO-ALIGNING AND POSITIONING | Feed auto-aligning and positioning ensures fast and correct alignment and positioning according to the drill plan. |
| ✓ | INTELLIGENT COLLARING              | Intelligent collaring sequence makes sure the hole start is perfect.   |
| ✓ | ITORQUE CONTROL                    | iTorque drilling control system ensures optimum drilling parameters for different rock conditions.                 |
| ✓ | iFLOW CONTROL*                     | iFlow control system ensures maximum drilling performance in difficult rock conditions through optimal flushing.   |
| ✓ | AUTOMATIC PIPE HANDLING            | Automatic pipe handling adds and removes pipes always in the correct and efficient way.                            |
| ✓ | FEED TO TRAMMING SUPPORT ASSIST*   | Feed to tramming support assist enables automated folding of the feed to a tramming position.                      |
| ✓ | TROUBLESHOOTING                    | Troubleshooting functionality gives access remotely to all system functions by easy-to-use flow chart type of GUI. |

\*Only in Leopard™ DI650i

# AUTOMATION-READY DRILLS FOR SMARTER MINING



## THE FOLLOWING DRILLS ARE AUTOMINE® COMPATIBLE:

### **PANTERA™ DP1100I, PANTERA™ DP1500I**

Pantera™ DP1100i and Pantera™ DP1500i are hydraulic, diesel-powered, self-propelled top-hammer drill rigs ideal for production or pre-split drilling in large quarries or open pit mines and construction sites. These intelligent, crawler-mounted rigs produce a range of drilling information, including the condition of the drill and work performed. The rigs drill holes with a diameter of 89 to 152 millimeters (3 ½ to 5 ½ inches).

### **LEOPARD™ DI650I**

Leopard™ DI650i is a diesel powered, self-contained crawler mounted intelligent down-the-hole drill rig designed for demanding high-capacity production drilling applications in surface mining and large-scale quarry applications. It drills larger hole sizes from 115 to 203 mm (4 ½ to 8 inches).

# SANDVIK PARTS & SERVICES

PROUDLY KEEPING YOU ON TRACK

Round-the-clock service, qualified engineers and genuine components and parts on demand minimize unplanned downtime and ensure safer, more efficient and more productive operations.

AutoMine® Surface Drilling offers the benefit of remote operation for Sandvik iSeries drill rigs aimed at improving safety, reducing cost, and increasing production. One operator can control a fleet of drill rigs.



ROCKTECHNOLOGY.SANDVIK/AUTOMINE-SURFACE-DRILLING

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