SANDVIK

AutoMine® Surface Drilling Training Simulator

Product Sheet for Boom Drills

AutoMine® Surface Drilling Training Simulator

The AutoMine® Surface Drilling Training Simulator is an essential tool for learning to operate multiple Sandvik i-Series drills simultaneously. It enables operators and specialists to master tele-remote and autonomous operations using the AutoMine® system. This simulator supports training for Leopard™ DI650i drills, providing a comprehensive learning solution.

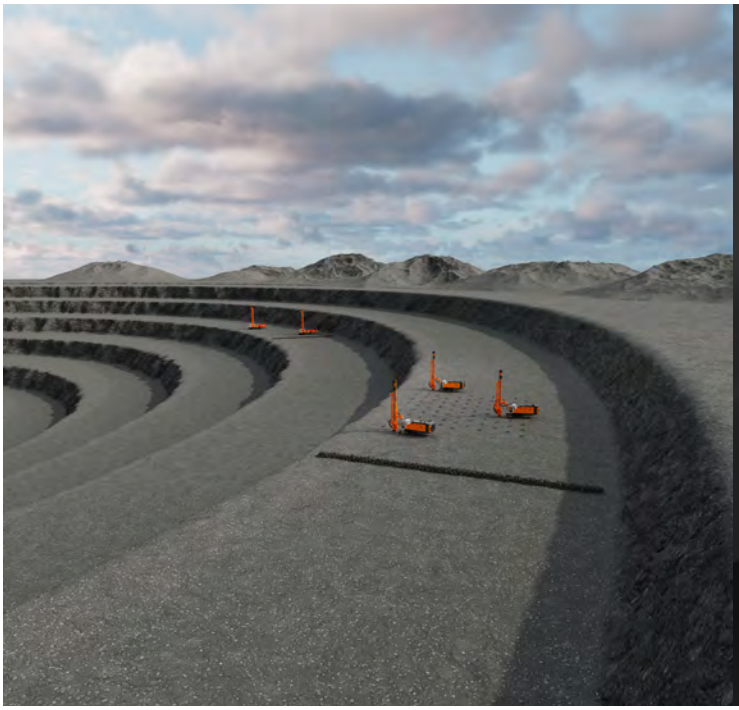
AutoMine® Surface Drilling Training Simulator includes authentic AutoMine® software, controls, and drill control system software to ensure a realistic and precise training experience for users. These components allow users to train without the need for real drills or designated production areas, enhancing safety and reducing possible loss in productivity during the training. Through structured training sessions, the program systematically covers critical components and objectives, such as:

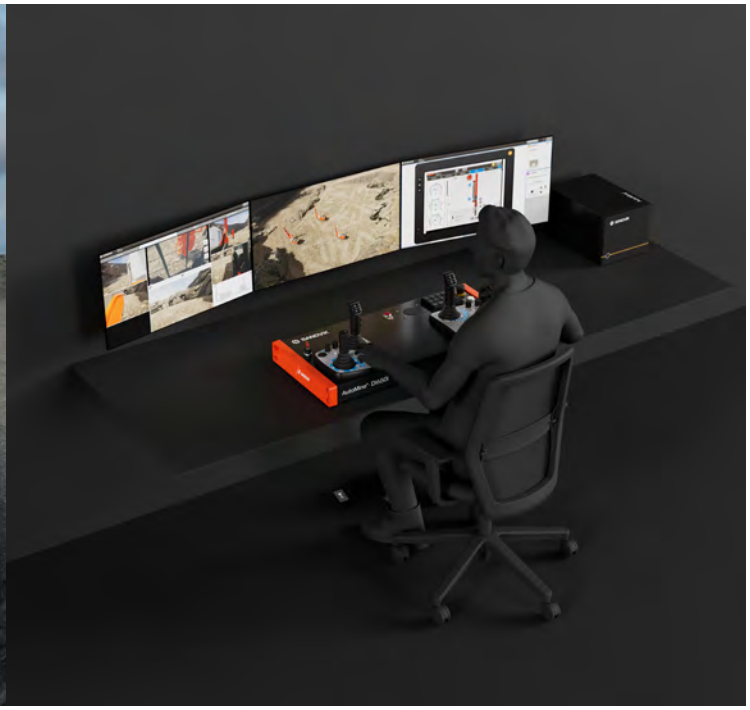
- Mastering the AutoMine® user interface and controls
- Monitoring automated operations effectively
- Operating multiple rigs simultaneously
- Planning autonomous tasks for drills and tracking their progress

The simulator software integrates proven components from widely utilized Sandvik surface drills training simulators, known for their accuracy in replicating rig cabin operations. This same level of precision is applied to the AutoMine® Surface Drilling Training Simulator, focusing on the advanced training required to tele-remote control multiple drills simultaneously, plan autonomous tasks, and manage a larger fleet of rigs.

By using the AutoMine® Surface Drilling Training Simulator, operators and specialists can achieve proficiency in modern drilling technologies, ensuring efficient and safe operations in real-world mining environments.

Main features





AutoMine® Surface Drilling Training Simulator is flexible and compatible with different setups. It can be used alongside a standard AutoMine® operator station or paired with a dedicated desktop control console featuring authentic rig controls, pedals, and standard office displays. The simulator with the control console is compact, packaged in a single transport case, making it easy to move and quickly set up for on-site training sessions at mine sites.

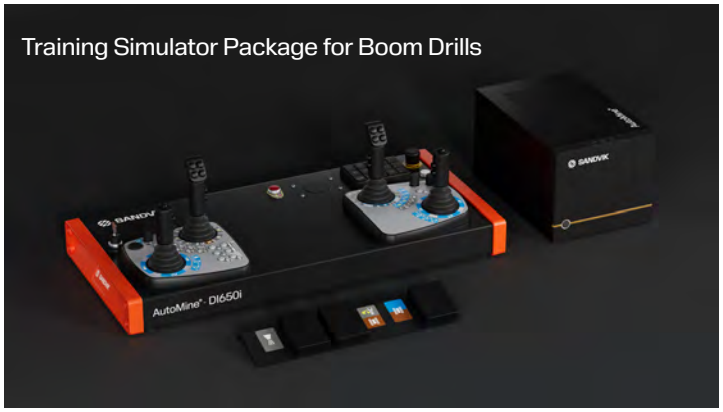
Authentic with AutoMine® components

Package covers authentic AutoMine® controls, AutoMine® software, and rig control system software for a highly realistic training experience. Compatible with AutoMine® Universal Operator Stations or AutoMine® operator stations for boom drills.

Key features including:

– Operation of Leopard™ DI650i drills, with the capability to operate up to 3 drills of the same type simultaneously.
– Autonomous production cycles, including path planning and monitoring autonomous operations. Covers all AutoMine® system functions, including diagnostics and troubleshooting.
– Realistic camera views and viewing angles, real camera feeds to replicate genuine AutoMine® operations.
– Mining-like simulation environment complete with realistic elements such as drill benches and high walls, enhancing operator preparation for real-world scenarios.
– Standalone system with no need for external network connections.

Note: *This excludes the AutoMine® safety system; however, separate virtual training programs are available to ensure operators gain necessary safety system expertise.*



Auto Tramming
Using all onboard automation functions: auto drill with rod changing, collaring, positioning and alignment, support and detach
Geofence functionality
Multi-machine tele-remote and autonomous operation
Calibrations, basics of troubleshooting using machine GUI's built-in features
Usage of TIM3D navigation system and work settings

Additional training add-ons with role specific training programs and scenarios will be available for purchase in the future. To ensure systematic learning for operators and specialists and enabling further competence development.

Training Setup

Training Simulator with AutoMine® Operator Station

Using an actual AutoMine® Surface Drilling operator station offers the most authentic way to operate the simulator. This setup is ideal for training operators and specialists prior to the commissioning of the actual AutoMine® system. Additionally, the station can later serve as one of the operator stations for the live AutoMine® system, ensuring seamless integration and practical use.

Components of Delivery:

- Simulator PC
- Simulator License (dongle included)

Note: *A reusable transport case for the simulator PC is not included.*

Installation Requirements:

To set up the simulator, the following components are needed:

- AutoMine® Universal Operator Stations or AutoMine® operator stations for boom drills
- An **extra display** to show the “simulated drill bench” view provided by the simulator. The display must meet a minimum resolution of Full HD (1920x1080) and should connect to the simulator PC using an appropriate cable.
- Power supply for the simulator PC.

This setup ensures a realistic and practical training experience, preparing users for real-world operations with the AutoMine® system.

Training with standard AutoMine® operator station.

Training Simulator with Desktop Control Console

The desktop control console setup offers a compact and space-efficient solution, allowing for ease of transport and quick setup. Despite its smaller footprint, it includes authentic rig controls to ensure a comprehensive and effective learning experience. This setup is ideal for organizing specific training sessions or establishing a space-efficient, permanent training system for continuous competence development for drill operator.

Components of Delivery:

- Simulator PC
- Simulator License (dongle included)
- Desktop control console (Choose from option: DRi DI650i)
- Foot pedal assembly (DI650i only)
- Transport case

Installation Requirements:

To set up the desktop control console simulator, the following components are required:

- Three displays for AutoMine® and simulator screens, with a minimum resolution of Full HD (1920x1080).
- Office desk for the setup.
- Power supply rated at 100-240VAC.

This setup combines portability, ease of installation, and authentic simulation tools, ensuring a practical and impactful training experience for drill operators.

Training with desktop control console featuring authentic AutoMine® rig controls, pedals, and standard office displays.

Installation requirements

Desk size and type	Office table, thickness of table top 10 – 52 mm
Power supply	100 – 240 VAC
Operating temperature	0 ... +35˚C (For equipment refer to equipment specific technical specification)
Display (not included in standard delivery)	At least Full HD (default) 1920 x 1080 DisplayPort 1.4

Desktop control console

Authentic rig controls including AUX panel and fire suppression activation

Power supply	110-240V, C13
Dimensions	840 (W), 395 (D), 271 (H) mm
Weight	15 kg
Switch	ON/OFF switch

Computer

Model	Powerful PC with dedicated graphics card
Operating system	Windows 11
Power supply	110-240V, C13
Dimensions	247 x 215 x 368 (mm)
Weight	3 kg
Display connector	• 2 x DisplayPort • 1 HDMI

USB ports for license dongle, mouse and keyboards. **Note**: No mouse & keyboard included in delivery, but are required for use.

Transport case

Robust plywood box with handles and wheels, fits simulator PC and desktop control console and cables

Dimensions (mm)	973 x 441 x 473
Weight	45kg (including simulator PC & control console)

Product documentation

Product manuals (English as default language)	User Guide

Compliance

2014/30/EU: Electromagnetic Compatibility (EMC) Directive

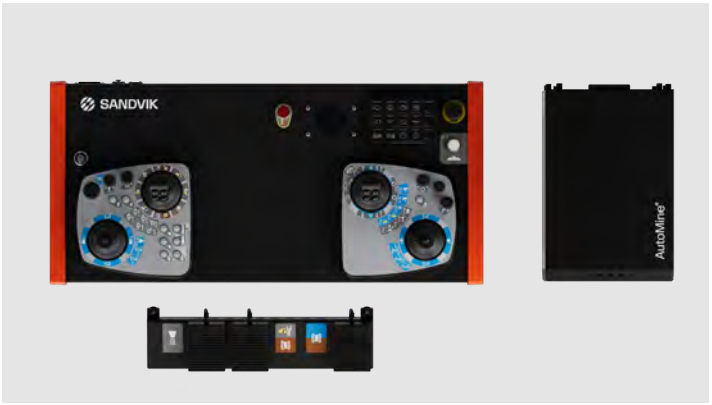
2014/35/EU - Low Voltage Directive

EN 55032/2015/EU: Electromagnetic compatibility of multimedia equipment

EN 55035/2017/EU Electromagnetic compatibility of multimedia equipment

2011/65/EU: on the restriction of the use of certain hazardous substances in electrical and electronic equipment

AutoMine® Training Simulator for Leopard™ DI650i drills



© Business Area Mining 2025.
Legal notice: All trademarks and logos appearing in this material are owned by the Sandvik Group of companies, unless otherwise specifically indicated