

AUTOMINE® LITE 2 SINGLE MACHINE AUTOMATION

PRODUCT SHEET

AUTOMATION YOU ARE READY FOR

The AutoMine® product family offers an advanced and reliable automation and teleoperation system for Sandvik underground loaders and trucks. The continuously evolving, award-winning AutoMine® portfolio ranges from tele-remote or autonomous operation of single pieces of equipment to multi-machine control and full fleet automation with automatic mission and traffic control capabilities – all built on the same robust platform.

With AutoMine® solutions, system operators supervise and control driverless loaders or trucks from the comfort and safety of a remote control room. Sandvik systems provide a safe controlled environment, which increases mine productivity and profitability as well as protects operators and other mine personnel in underground operations.

PRODUCTIVITY WITH COST EFFECTIVE MINING

AutoMine® Lite is an automation system for a single Sandvik loader or truck. The solution provides an easy way to start exploring the full potential of Sandvik equipment automation and achieve benefits of increased productivity, safety and cost efficiency in mining operations.

AutoMine® Lite provides functionality for the operation and supervision of an automated loader or truck. It is particularly suitable for mining operations such as sub-level open stoping, sub-level caving, transfer levels or individual block caving drives.

While designed to be relocated between production areas, AutoMine® Lite offers staggering productivity by high-speed tramming, high availability as well as continuous and consistent operation.



AUTOMINE® LITE CONSISTS OF:

- ✓ Ergonomically designed remote operator station
- ✓ Full onboard automation package
- ✓ Dedicated safety system
- ✓ Wireless communication system

AUTOMATED PRODUCTION CYCLES*

The entire production cycle for a loader or truck can be automated with autonomous tramming and dumping as well as with loaders using Sandvik's automatic bucket loading assistant functionality. The core technology of AutoMine® Lite lies in its unique and advanced navigation system, which allows fast tramming at maximum speed of the equipment. Teaching of automated routes is done by a single drive-through between the load and dump points. The system includes capabilities to further optimize these routes, and in automation mode the machine very accurately follows and repeats the routes, consistently maintaining the same high productivity whilst avoiding wall collisions.

AutoMine® Lite is compatible with other AutoMine® packages. It can thus be easily expanded to applications that require multiple loaders or trucks operated by each individual system operator. AutoMine® Lite provides extra productive hours each day by allowing the continued operation of the loader or truck during blast clearance times. Additionally, equipment utilization is increased as operators can hand over between shifts much faster without the need to locate and travel to the equipment. Another advantage of AutoMine® Lite is that it extends the lifetime of equipment, as the machine runs optimally, reducing wear and tear and maintenance costs.

UNCOMPROMISED SAFETY

Sandvik's AutoMine® system eliminates operator exposure to hazards in the underground environment and significantly improves the operator's working conditions and safety. With AutoMine® Lite one operator is able to manage the operation of a single automated loader or truck from the safety of a control room environment.

AutoMine® is designed to a high level of safety. With an isolated production area, the heavy automated equipment and mine personnel are separated. Sandvik loaders and trucks equipped with the full AutoMine® onboard package are capable of high performance operation leading to increased productivity, safety and efficiency. With open interfaces, AutoMine® can also be integrated with other mining IT systems.

KEY FEATURES – YOUR BENEFITS*

AutoMine® Lite is designed for maximum productivity, profitability and safety:

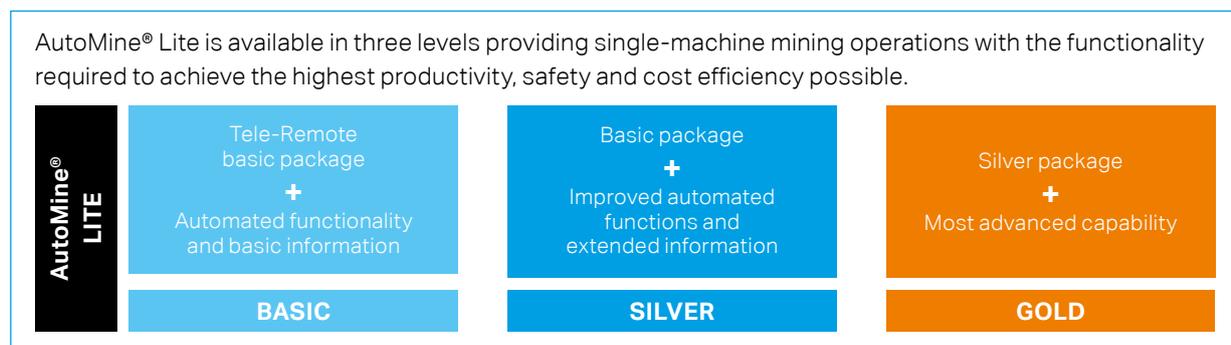
- ✓ Automated production missions with targets
- ✓ High-speed tramming with optimization capabilities, automatic dumping and automatic loader bucket loading assistant

- ✓ Production area maps with real-time monitoring, area management and playback tools
- ✓ High safety integrity with integrated easy-to-use safety barrier system
- ✓ Full onboard automation package
- ✓ Integrated into the intelligent control system of Sandvik loaders and trucks for full monitoring and control functionality
- ✓ Detailed mission-based production, condition and utilization reporting via the system display and external interfaces
- ✓ User management with user-specific language selection
- ✓ Full functionality of AutoMine® Tele-Remote for smart teleoperation of the loader
- ✓ Upgradable to AutoMine® Multi-Lite for multi-machine control or AutoMine® Fleet automation with traffic and mission control

BACKED BY SANDVIK

The AutoMine® product family allows you to start your automation journey the way that best fits your needs. As a future proof and upgradeable system, AutoMine® is an ideal solution for customers looking for a simple yet powerful way to explore the potential of teleoperated or automated equipment as well as those who wish to automate the production cycle for loaders and trucks.

As a flexible and modular system, AutoMine® can be successfully adapted to different mining methods and applications. Designed to decrease costs and increase productivity and safety of your mining operations, it will help your business grow today and tomorrow.



ROCKTECHNOLOGY.SANDVIK

*Features vary depending on automation package (Basic, Silver, Gold) selected.