Mobius for Drills



Every situation planned. Every outcome optimized.

Mobius for Drills

Mobius for Drills is a new digital hub that empowers leadership and operators to plan and optimize the drill level and tie the entire value chain together with a single tool.

Using embedded artificial intelligence and progressive robotics, the user-friendly Mobius for Drills system enables mines to remotely command, control, and monitor their drill fleet to maximize productivity and safety.

The digital power of Mobius for Drills

Mobius for Drills gives you true situational awareness through the ability to monitor the location and status of all drills and track production progress in real-time.

An intuitive interface displays data in easy-to-understand dashboards and reports that provide the right information at the right time.

Valuable insights

Mobius for Drills can map drill usage, evaluate productivity, track consumables, and compare planned outcomes against actual results. This data enables optimization of the drilling fleet within the mining value chain.

By providing a single platform for all stakeholders in a

drilling operation, leadership and operators can quickly navigate information, filter it to their needs and streamline day-to-day and long-term strategic decisions.

Mobius for Drills is designed to be flexible and scalable, ready to work on small or large operations with expert support from Epiroc. The system has the ability to work across Epiroc surface drills with various levels of technology.

It's also future-ready with a strong platform for development. Every Mobius application enabled connects more of the value chain.

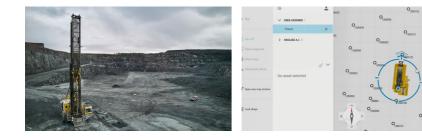
With Mobius for Drills, every situation can be planned and every outcome optimized.

Hain benefits

Connected through scalable architecture that allows the system to match your roadmap and interface points. Allows for drill OEMs to integrate easily.

Intuitive and smart design reduces the learning curve with a flexible and natural interface for effective use and navigation. A value chain perspective allows for refined decision making.

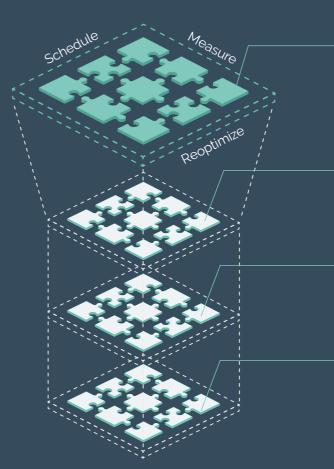
Focused to be your primary drill fleet tool for all stakeholders. Detailed views capture valuable drilling insight in a digital environment.





We believe in creating a harmonized mine where the value chain is connected, and every level is optimized.

Mobius for Drills' holistic approach ties the layers together, building from a detailed drill layer to ultimately create a safer and harmonized mine. Mobius for Drills was designed from the ground up to harness the full benefits of robotics and digitalization growth in our industry, interacting with manned operations.





Drilling

Integration with semi or full autonomous drills. Data exchange, situational awareness, and autonomous navigation can be significantly enhanced.



Blasting

Tele-op, semi-autonomous, or fully autonomous navigation of blast vehicles such as Anfo and stemming vehicles.



Haulage

Autonomous control and choreography of haul truck fleets and manned vehicles, enabling significant gains in utilization, productivity, and cost reduction.



Dozer

Leverage the dozer's existing CAN Bus system to direct vehicle functions and monitor real-time vehicle health indicators.

Face all your challenges with one tool

Mobius for Drills is designed to tie your value chain together through forwardthinking digitalization techniques and progressive robotics. Our mines are manufacturing environments full of complex and interrelated decisions made each day. We recognize these decisions are not easy to make with tools that only focus on individual layers of the value chain.

How do we safely interact between automation and other equipment?

Is the material being delivered today going to match targets for tomorrow?

When will this drill plan be completed?

How does the drilling data optimize the blast plan?

C.C.C.

How close to optimal is my drilling process?

Did this follow the plan, or were deviations needed?

Image: Second second

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525

Insight is a product within the Mobius for Drills application. The system specifically focuses ⁶⁰ on providing leadership and operators tools to make quick and effective decisions for their drill ⁵⁹ fleet. Advanced digitalization techniques provide clear to understand dashboards and real, time awareness of the working fleet. The user interface is positioned to provide both day to day tactical decision making and more strategic future operational transitional decisions. You'll find the simple to understand interfaces provide the fuel for powerful decisions.

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Epiroc

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The hub for your drilling operation

A first-of-its-kind set of carefully crafted dashboards and reports that consolidates multiple data points to improve decision making capability. Interfaces ready to tie into multi OEM drill fleets; providing a single source for all stakeholders.

Situational awareness

Incorporate your mine maps to know the location and status of your (mixed) fleet. Track progress for the drills missions to stay in front of your production needs.

Flexibility

Customization options allow tailoring to specific user needs. Our partnership model provides continual development and refinement though accessible system updates.

Scalable power - with each additional Mobius application enabled, more of your value chain becomes connected.

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ASI Mining's Mobius® platform

The Mobius Traffic Management System platform is a command and control software system that supports a broad spectrum of autonomy for mobile mining equipment. It supports teleoperation, semi, and fully autonomous modes and covers applications from drill and blast through Autonomous Haulage Systems.

Its interoperable architecture enables the integration of OEM autonomousready vehicles or the retrofit conversion of nearly any make or model controlled by Mobius. Mobius can monitor manually operated machines within an autonomous zone enabling safe manual and autonomous vehicle traffic.

Integration of autonomous operations such as drilling and blasting with other applications provides situational awareness, coordinated path planning, and broad data sharing across the entire mine ecosystem.

Extensive retrofit support for legacy systems allows mines to automate older fleets and equipment that would otherwise need to be replaced or left out of an automation plan.

Mobius may be used as a Fleet Management System (FMS) or be integrated with a legacy FMS. Software interoperability allows mines to continue using existing systems and customizations related to those systems. In addition to FMS, Mobius may also support other optimization, monitoring, and mining analytics programs.

United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow. **epiroc.com**

