

OPTIMINE® ANALYTICS

PRODUCT SHEET

OPTIMIZE YOUR MINING PROCESS

OptiMine® is an analytics and process optimization suite that offers a collection of digital solutions and accompanying Sandvik services targeted to improve the efficiency of your mining operations. Suitable for all underground mining applications and the entire mobile fleet, including other OEM equipment, the solution provides transparency of your underground operations and enables joint development of your mining process efficiency supported by our experts.

OptiMine® Analytics and process optimization solutions can be combined as needed to build up the required functionality. With open interfaces, the solution can be seamlessly integrated to your mine's digital ecosystem.

FROM DATA TO ACTION

OptiMine® Analytics is the next generation of OptiMine® that transforms data into process improvement via predictions and actionable dashboards. It complements and draws on data from the OptiMine® digital solutions including Monitoring, Location Tracking, Scheduler and Task Management, as well as other mining and maintenance systems.

Based on a combination of data from equipment sensors and data from elsewhere within your mining digital ecosystem, OptiMine® Analytics dashboards and supporting expert services provide insights allowing you to gain operational improvements in your mining process. Through visualization of the Overall Equipment Effectiveness (OEE), OptiMine® Analytics intuitively pinpoints bottlenecks and areas for improvement for your fleet in terms of mechanical availability, utilization and the quality of its use by your operators via those key performance indicators that your operation is most focused on.

OptiMine® Analytics can tell you what has happened, what is happening and what is predicted to happen

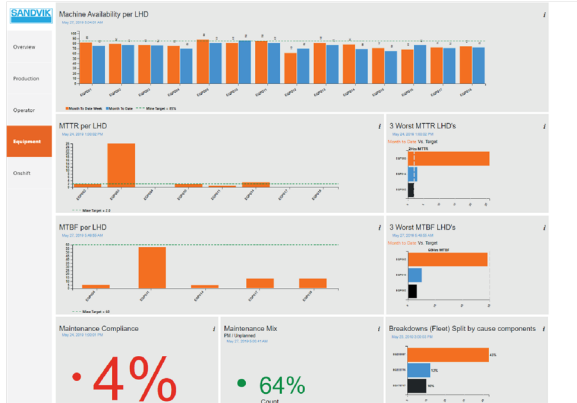


underground. Analytics dashboards can be pointed toward any historical timeframe in order to learn, adjust and optimize. OptiMine® Analytics also shows you what is happening underground right now, allowing you to react in real-time and optimize, in shift. OptiMine® Analytics can tell you what is predicted to happen when it comes to breakdown of key components in your equipment fleet, allowing you to intelligently schedule maintenance and optimize fleet mechanical availability.

OptiMine® Analytics ensures the insights are available right where they are needed most; as input into the operations management and task scheduling process. The solution harnesses the power of your digital ecosystem to support improvements in your overall operational effectiveness.

PREDICT WITH ACCURACY

Sandvik is able to provide unique insight into the health of your fleet of Sandvik equipment. OptiMine® Analytics employs proprietary predictive models to provide insight into the health of key components and impending breakdowns. The reliability of any prediction improves with additional empirical data and Sandvik is able to leverage upon historical breakdown related data from not only your own Sandvik fleet, but the entire global installed base of Sandvik equipment when designing its predictive models.



Sandvik has unique expertise and understanding of the healthy operating ranges and behavior of measurements data from key components within equipment, which is complemented by knowledge of equipment failure modes gleaned from its entire installed base. This wealth of data translates to an unmatched reliability and accuracy of predictions, the predictive models being more precise compared to predictive models built without application expertise.



REALIZE VALUE WITH SANDVIK EXPERTS

Unlock additional value from your operations with OptiMine® Analytics:

- ✓ Improve safety and efficiency through visibility of your underground mine operations.
- ✓ Translate insights into actions jointly with Sandvik mining optimization experts.
- ✓ Gain incremental improvement in Overall Equipment Efficiency and get additional productive hours and subsequently more tonnes.
 - Predicting breakdowns and monitoring maintenance compliance & performance enables higher fleet lifecycle efficiency
 - In-shift utilization increase through insight into recurring bottlenecks.
 - Operator competence development can enhance production quality.
- ✓ Utilize predictive maintenance practices to reduce the value of lost production.
- ✓ Digitalize your mine's way of working, supported by our change management experts.

BACKED BY SANDVIK

The transparency of equipment performance and health is essential in mining process optimization, and can be gained through a convenient information management system. As a global leading supplier of digital mining and automation solutions, Sandvik offers the right technology for your mining needs both today and tomorrow.

OptiMine® is a comprehensive analytics and process optimization solution for mining operations. With OptiMine®, you can truly take the lid off of your underground mining operations, decrease costs, as well as increase productivity and safety.