
Mining Update

Q2/23

**Electrification | Automation | Digital | Grinding |
Hoisting | Material Handling | Services**

Please register again to continue receiving our quarterly mining newsletter

Thank you for your previous registration and your interest in receiving our quarterly newsletter. We are pleased to inform you that we are migrating to a new platform to further enhance our communication.

The privacy and security of your information are of utmost importance to us. As part of our efforts to safeguard your personal data, we have decided to cease storing your information on our old platform. However, in order to continue receiving our quarterly newsletter and align with our privacy policy, we kindly request that you provide your consent once again.

We hope to continue providing you with valuable content in our quarterly newsletter!

SIGN UP

Our mining solutions



What does it take to build a successful all-electric mine?

The ABB eMine™ framework makes the all-electric mine possible with purposeful approach and methods. It is built on five pillars encompassing the entire process and details a phased approach addressing access to a broad portfolio of fit-for-purpose mining equipment solutions, early involvement of all partners in pre-planning, the importance of industry collaboration to accommodate evolving technology and future-proof mine design.

[FIND OUT MORE](#)



Bridging the industry knowledge skills gap with digital solutions

ABB



A practical how-to guide for Connected Workforce



Connecting workforce

You are looking to grow your business but face headwinds: a skills gap between job requirements and the available labor pool or the unexpected.

ABB can help you stay ahead of the curve with more intuitive on-the-job guidance for executing work instructions, procedures or inspection rounds.

Contact us to discuss how we might help you leverage smart devices and collaborative mobile apps.

[WATCH A DEMO VIDEO](#)



Our eXperience in hoisting improves yours

With over 130 years in the mining industry, we strongly believe that experience is only valuable when it is applied and shared.

That's why we have built ABB Ability™ NGX Hoist Control, an optimized and unified global hoist control system that gives you an improved user experience, improved reliability, higher levels of protection, and more flexibility than ever.

[LEARN MORE](#)



Grinding transformation

Gearless mill drives, digitalization, AI and analytics are transforming grinding operations at mines worldwide

ABB

DOWNLOAD YOUR FREE COPY

New project



ABB and Perenti collaboration awarded all-electric mine study from IGO

ABB's eMine™ framework continues to build momentum. Our approach is about working with others on the journey to the all-electric mine where electrification, automation and digitalization combine. Today, we can announce our first deal under our collaboration with mining services group Perenti as, together, we have signed up to work with Australian mine operator IGO Ltd. at their Cosmos Nickel Project.

[LEARN MORE](#)

Mining insights

Mine Power Systems

Renewable energy can be intermittent, so new solutions are required to ensure power is integrated with management and storage systems that can guarantee an uninterrupted supply 24/7.

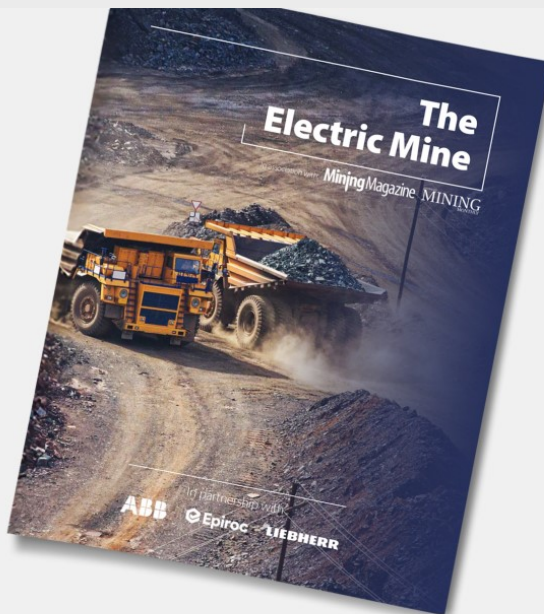


MEHRZAD ASHNAGARAN
GLOBAL PRODUCT LINE MANAGER
ELECTRIFICATION



MARCOS HILLAL
GLOBAL PRODUCT LINE MANAGER
AUTOMATION

[READ THE ARTICLE](#)



In association with:



What's inside?

- What are the different components of an electric mine?
- What needs to be done to prepare a mine for battery-electric vehicles?
- What is the role of digitalization and automation in enabling electric mines?

[DOWNLOAD THE SPECIAL REPORT NOW](#)



A goldmine of experience!

Our pilot ABB Ability™ eMine FastCharge solution is set to become the world's fastest and only fully automated charging system for mining trucks, offering up to 600kW of power.

In the latest edition of ABB Review, Nic Beutler explains how ABB is transforming today's mine operations while improving the world beyond them.

[READ MORE](#)

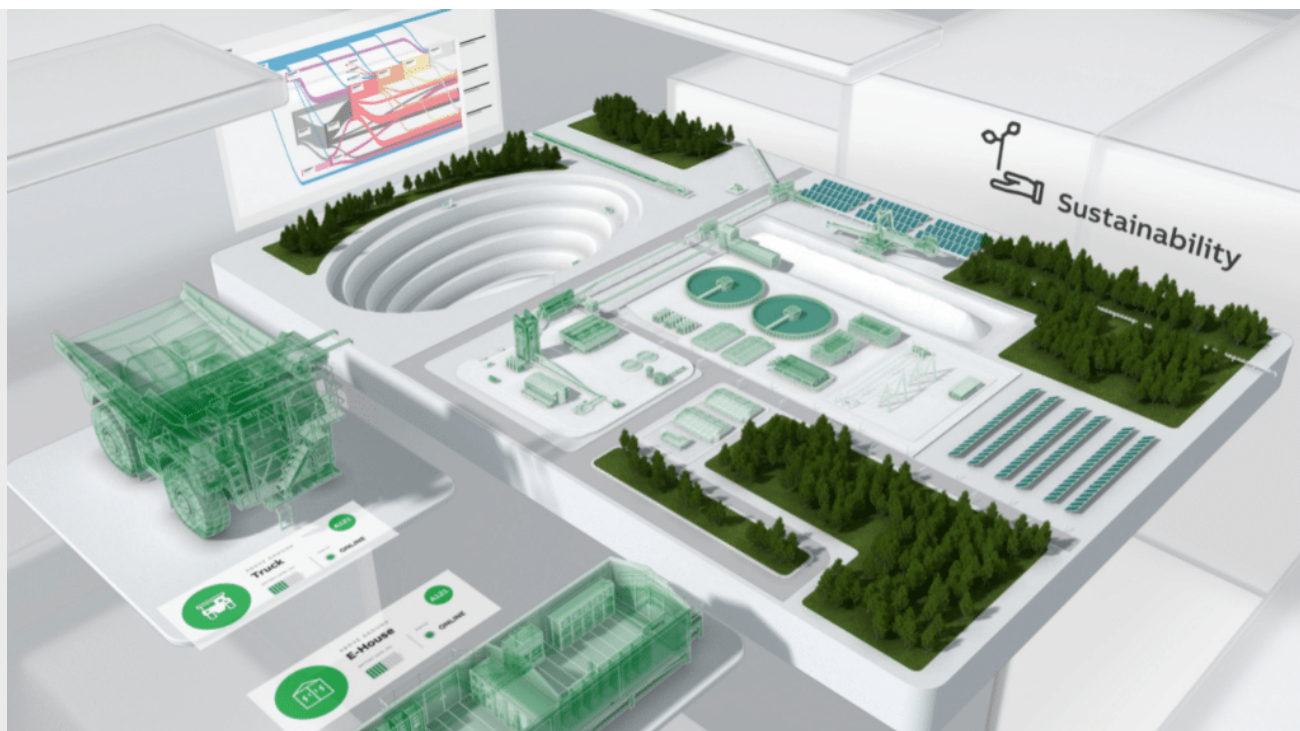
“The eMine™ vision encompasses full integration of electrification and automation from ‘pit to port’ to help the industry decarbonise not only its fleet, but the entire ecosystem.



Mehrzad Ashnagaran
Global product line manager mine electrification
ABB

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Simplifying the digital transformation in mining

The need for efficiency has never been more multi-faceted, and digitalization has opened the door to new ways of unlocking productivity while maintaining safe operations.

However, implementing a digital transformation is a process that takes time and can be daunting for some mining companies.

Sanjit Shewale, global head of ABB's Digital business line, shares his views with Australian Mining magazine on simplifying Digital transformation in the Mining industry.

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Reducing energy costs and enhancing safety with innovative ventilation systems

As one of the most cost and energy-intensive components of a mine, ventilation reliability and efficiency...

By Georgia Williams

"Ventilation is one of the most energy-demanding systems at a mine"

Until 1986 canaries were used to warn of danger in underground coal mines. The small birds were kept in cages near miners to warn of gas leaks. If poisonous gases were unearthed, they would kill the canary first, allowing the miners to escape.

Underground ventilation has come a long way from the canary in the coal mine as technology makes mining at deeper depths possible. Ensuring a steady supply of fresh air is only one of the functions a ventilation system must provide the safe and effective removal of air contaminants like diesel fuel, dust, and gas is also an essential function. The system is also responsible for heating and cooling subterranean mines.

Aside from reliability, ventilation systems also need to be efficient and cost-effective.

According to an Engineering Journal report, ventilation is one of the most energy-demanding systems at a mine site accounting for as much as 50% of energy consumption and 15% of a mine's overall expenses.

Reducing energy costs has become especially important in the last year amid soaring energy costs and the European energy crisis. Miners wanting to bring down those costs are looking to ventilation technologies that are more cost and energy efficient.

"There is a much bigger focus on energy," said Jan Nyqvist, global product manager at ABB.

He continued: "Ventilation is one of the major energy consumers in an underground operation, so we see that mines are starting to concentrate much more on that to understand how they can reduce energy consumption from different mine systems as well as their overall footprint, allowing them to hit sustainability targets as they strive for net-zero emissions from production."

ABB's Ability Ventilation Optimizer is a ventilation on demand (VoD) technology that "intelligently" adjusts air flow to maximise air quality and minimise consumption, eliminating manual fan operation.

"Ventilation systems account for as much as 50% of energy use in subterranean mines, and deploying

ABB's VoD solution at the Chuquibambilla underground copper mine in Chile



April 2023 www.MiningMagazine.com

Ventilation innovation is a breath of fresh air

"Ventilation is one of the major energy consumers in an underground operation, so we see that mines are starting to concentrate much more on that to understand how they can reduce energy consumption to hit sustainability targets," said Jan Nyqvist, Global Product Manager Underground Mine Solutions at ABB.

ABB's Automation experts spoke to Mining Magazine about mine ventilation.

READ MORE

Join ABB at our future events in 2023

Hoist & Haul, Montreal - Canada, August 13-16



Meet us during the global conference where we will share our insights into the latest trends and technologies in shaft hoisting.

ABB at Hoist and Haul

Mining Indonesia, Jakarta - Indonesia, September 13-16



Come listen to ABB's decarbonization initiative eMine™ at the largest international mining equipment exhibition in Asia.

See the program

SAG Conference, Vancouver - Canada, September 24-28

Perumin 36, Arequipa - Peru, September 25-29



Come visit us in **Pod D**. Join our grinding experts showcasing our latest technology and product updates.
ABB @ SAG 2023



Whatever stage you are at in your decarbonization journey, please come talk to ABB experts in **Booth E-72** about how we can support you through your energy transition.
See the program

Procemin, Santiago - Chile, October 4-6



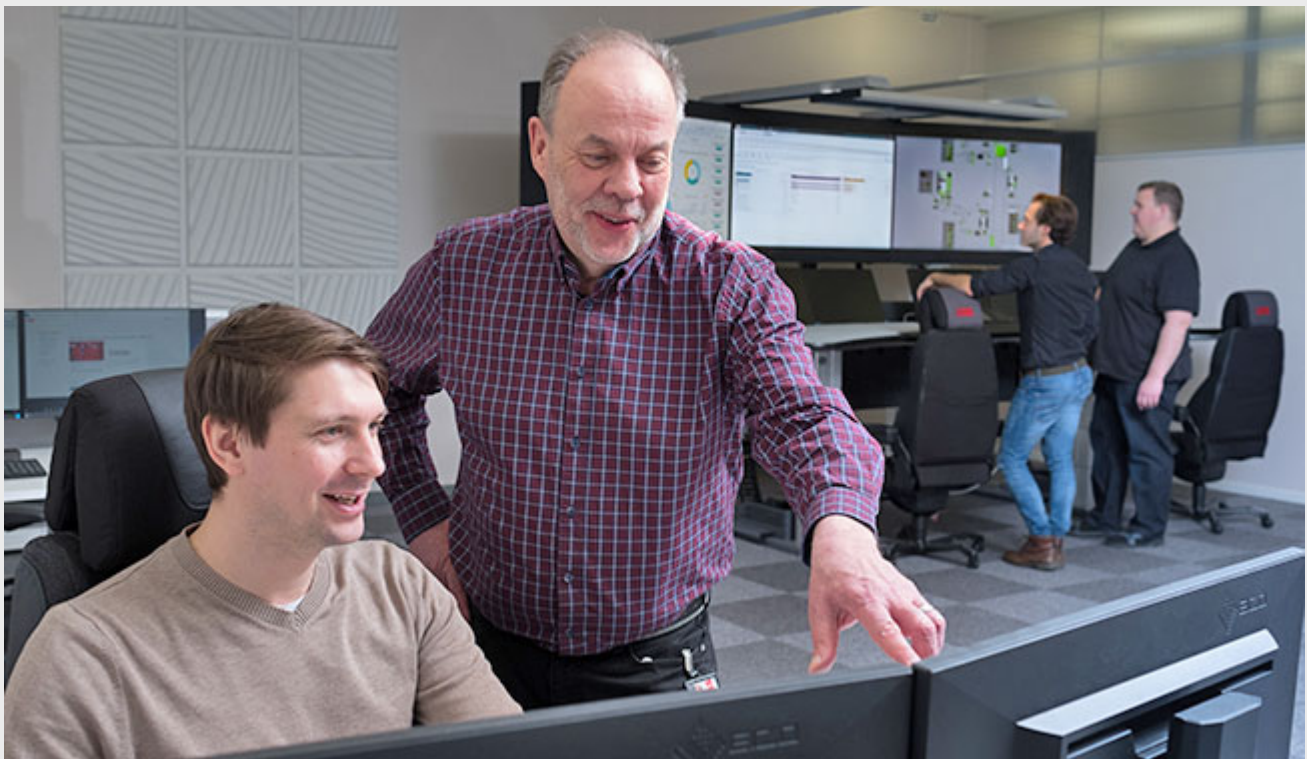
Join us in **Stand #3** and learn more from our Gearless Mill Drive experts in mineral processing and advanced condition monitoring platforms.
See the program

FT Mining Summit, London - UK, October 5-6



How will the industry work to realign production and distribution to fit the new macro environment?
Join ABB at the summit

Meet the ABB mining people



Celebrating 45 years of developing world-renowned hoisting technologies

It's apt that a Swedish engineer has led the development of so much of ABB's hoisting technologies as ABB's first electric motor for a mine hoist was commissioned in Sweden back in 1891. Today, the mining sector is adopting technologies to help it – and the world – get to net zero and ABB's experience across electrification, automation and digital solutions is supporting its customers.

[LEARN MORE ABOUT BENGT'S STORY](#)



Meet the people of ABB Process Industries Switzerland

Contributing to ABB's overall purpose, we are happy to present the people of ABB Process Industries Switzerland. Learn about their passion and their motivation working at ABB, and beyond. See how they are enabling a more sustainable and resource-efficient future with our technology leadership in electrification and automation, industry-specific products and lifecycle services to our customers in the Mining, Aluminum & Cement industries.

[THAT'S OUR STORY](#)



Throwback



Highlights from Expomin 2023 in Chile

Watch the video summary of the key highlights of the international mining fair held in Chile and where ABB showcased with virtual reality presentations the newest developments in grinding and mining.

[WATCH THE VIDEO](#)

2nd Mining Tech summit

The conference brought together important representatives of the mining industry at regional and local levels, highlighting the latest technological advances and their solutions for the demands of today's market.



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