Technology in Mining





HATCH

Smarter solutions for today's challenges

Are you managing a mining operation or developing the strategy for a new project? Today's mines are deeper, hotter more complex and challenged by lower grades than ever before. This coupled with the cyclical nature of commodity prices adds even more pressure for miners to stay relevant with investors.

The industry has recognized the importance of zero harm to people and the environment– it is good business and a prerequisite for maintaining the social license to operate but cost pressures still exist.

The future success stories will not simply be incremental improvements based on cost cutting and continuous improvement techniques.

We at Hatch believe a step change is possible… which is why we have developed our technology roadmap to show the way to significantly increase productivities and bottom-line shareholder value.

With today's best practices as a baseline, we will work with you to take it to the next level. We'll help boost your capacity. Our professionals come from many different disciplines, with a world of experience serving the mining industry. You'll get targeted, innovative solutions that can enhance your operation and save you money. Using minimal viable product and thin slice techniques we will work with you to prove technologies for your specific applications. This both de-risks expenditures and gains execution credibility.

Whether it's finding new technologies and tools or adapting and modernizing old ones - it's about credibility to achieve speed – smarter solutions. We can help.

If you are considering any of the following, we can support you:

- Digital mining platform
- Electrification
- Continuous mining
- Automation
- Process intensification



Reducing reliance on diesel and electrifying equipment can produce positive results and help cut greenhouse gas emissions



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Services

Digital mining platform

Digital Mining Platform - transforming data from "unseen" to fully "visible" validated information in real-time.

Underground mining has been handicapped by not being able to "see" what is happening at the right time and frequency to drive effective business decisions. The current paradigm of cost cutting and traditional continuous improvement has not resulted in sustained bottom line value. Costs continue to escalate while productivities diminish, or stagnate under declining commodity prices.

Our Digital Operational Management System (D-OMS) is a structured approach to sustainably delivering higher productive capacity through "short interval control" (SIC). A mature D-OMS is transparent at all levels setting the stage for an agile workforce in mining.

Electrification

The mining industry relies on diesel-powered prime movers for surface and underground mobile equipment as well as for power generation at remote sites. Reducing reliance on diesel fuel and electrifying even the smallest pieces of equipment can produce positive results and help cut greenhouse gas emissions. We can help define and evaluate the benefits in terms of capital and operating costs, and find value when electrifying mobile equipment fleets and renewable power installations.

Continuous mining

Challenging current drill-blast-clean methods in mining can reduce costs and drive significant improvements in safety, automation, and efficiency. Continuous mining equipment and methods enhance the selectivity of ore from waste at the mine face and produce favorable comminution compared to blasting. By using data derived from innovation in underground technologies and applying our in-house expertise, we can define meaningful differences in efficiency between continuous and non-continuous mining methods.

Automation

Standardizing and automating practices can make huge differences to the bottom line. We work with our clients to help minimize variation in their processes, finding and implementing systems that create high-value results.

Process intensification

The key to enhancing value is to do more with less, both in terms of capital and operating costs. Our focus is on processing as early as possible in the value chain and pushing the boundaries on cost, energy, water, and labor efficiencies through employing innovative processing techniques. The plant of the future will be smaller, more agile with seamless integration between the mine and the mill.

About Hatch

Whatever our clients envision, our engineers can design and build. With over six decades of business and technical experience in the mining, energy, and infrastructure sectors, we know your business and understand that your challenges are changing rapidly.

We respond quickly with solutions that are smarter, more efficient, and innovative. We draw upon our 9,000 staff with experience in over 150 countries to challenge the status quo and create positive change for our clients, our employees, and the communities we serve.

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