



Automated Vehicles & Mining

An evolutionary step forward

Mining operators long ago turned to automation to improve safety and efficiency. In the last decade, automation has moved beyond familiar uses like remote controls and tele-operation to full automation—automation of drilling, loading, and hauling—and even full equipment electrification and automation. These innovations open new possibilities for working in previously inaccessible locations. Introducing battery electric automated vehicles (BEAVs) into these environments can be a tremendously successful endeavor with benefits to the owner, workers, and surrounding community. From moving people and equipment to performing such critical mining activities as drilling, loading, and hauling BEAVs can provide a wide range of services in and around a mine, all contributing to safer and more efficient mining operations.

Potential use cases:

LOGISTICS & MOBILITY

- People Moving
- Equipment Moving
- Traffic Control, Wayfinding and Signage

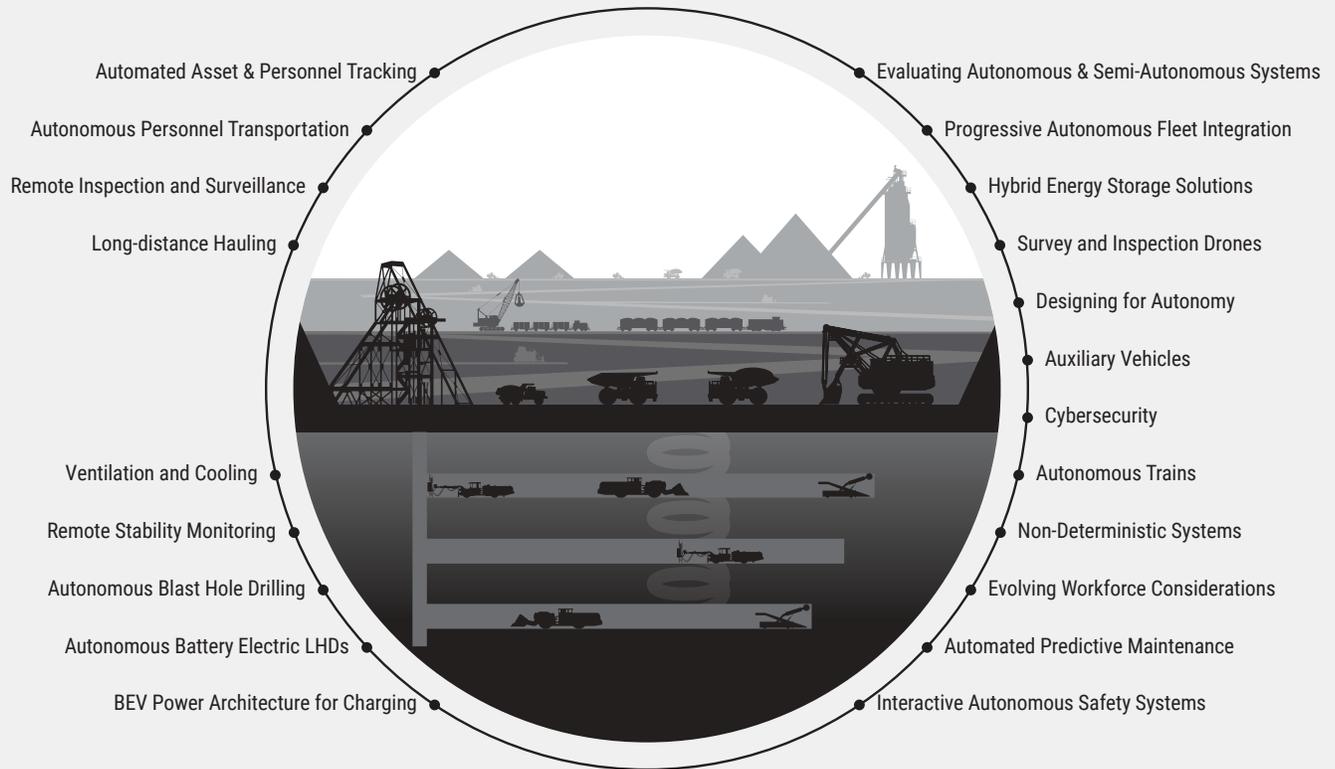
OPERATIONS

- Drilling
- LHD Trimming and Truck Loading
- Haul Truck Haulage

MAINTENANCE & SERVICES

- Cleaning
- Inspection
- Security
- UG CMS Stope Cavity Surveys
- Remote Ore Storage Monitoring

Autonomy in Surface and Underground Mining



Accelerating Autonomy in Mining

We take pride in providing innovative solutions that balance production goals with the requirements of good stewardship, environmental sustainability, and regulatory requirements. It is this passion that has us so invested in bringing autonomous vehicle technology to our mine operations. With promised benefits of safety and efficiency, the applications within these spaces are immense. Our AV consulting arm, Stantec GenerationAV™, is advancing automated mobility systems to create a safer, cleaner, more equitable world for future generations. Together with our mining professionals, we can help our clients determine the best use cases and create and implement a plan to deploy AVs in a way that adds value for everyone involved.

Services & Products:

- AV Strategy and Planning
- Learning Center
- AV Deployment Playbook
- Industry Analytics Platform
- Safety, Risk, and Compliance Assessment
- Infrastructure Planning and Design
- Stakeholder/End-User Research
- Cyber Security Assessment

Connect with us

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