We incorporate the latest industry-leading technologies into our operations, ensuring our clients receive the safest, most efficient drilling service.

The broad range of technologies we employ improves performance across all aspects of our operations, from drill rig enhancements to software that helps ensure we hit the ore body target consistently and technology that keeps our work sites safer and more secure.

TECHNOLOGY IN DRILLING

Ongoing improvements to operational efficiency are vitally important in the mining sector, regardless of whether the project is an exploration or mine-site based operation.

New technologies and innovative, practical design solutions are key contributors to delivering productivity gains and overall cost efficiencies.

We leverage our in-house engineering expertise to design innovative solutions that make our drill rigs more productive and safer for our crews to operate. We also employ a number of complementary ancillary technologies across our operations.

VALUE FOR CLIENTS

- Productivity and safety improvement focus across all aspects of operations
- Contribute to overall project productivity improvements
- Drive cost efficiency
- Utilise the most efficient, industry leading technologies
- Improve target zone intersection capability
- Monitor work sites in real-time
IMPROVING SAFETY ON THE BENCH

We use remotely operated blast hole rigs that allow crews to safely and productively drill in high risk work areas while positioning the operator a safe distance away from the rig in a self-contained, truck-mounted Drill Control Module. Importantly, these rigs improve safety without compromising the operational efficiency or quality standards of drilling operations.

RIG REDESIGN IMPROVES FLEXIBILITY

Our engineers have created a flexible, multi-purpose rig by redesigning a diamond drill rig to include air-core capabilities. If the geology shows promising results in low-cost air core drilling programs, the rig easily converts to diamond drilling to provide core samples for greater information and accuracy - without waiting to bring new rigs to site. This enables our clients to keep their drill program progressing, while managing costs by undertaking diamond core drilling only as required.

The rigs are mounted on tracks to access difficult terrain encountered during remote exploration projects and contain a unique hydraulic compressor. They are also fully self-contained with an on-board air and sampling system and are capable of achieving depths to 1000 metres.

HANDS-FREE ROD HANDLING

We have implemented hands-free rod handling on a number of rigs including RC, Weep Hole and Diamond rigs to reduce the risk of operator injury and fatigue during rod handling. These make rigs infinitely safer for our crews.

UNDERGROUND REMOTE-CONTROL PANELS

Our underground rigs utilise remote control panels allowing the crews to operate them from a distance and removing personnel from within close proximity to hydraulic hoses. These units also contain a hands-free rod handler which is also remotely controlled. They are capable of continuing to operate during shift change to further enhance productivity of underground drilling operations.
FASTER, EASIER, SAFER RIG MOVES

We use a hook and lift system to easily transport drilling equipment and drill shacks between drilling sites or holes. This system reduces manual handling and requires only one multi-purpose truck reducing exposure to driving risk.

REAL TIME SAFETY AND SECURITY MONITORING

Strategically mounted cameras on rigs, equipment and buildings monitor site activity, providing complete visibility of your workplace – that you can see from anywhere using our mobile app.

The footage can prevent workplace injuries as real site-based footage is used during training sessions to demonstrate behavioral factors or potentially dangerous situations that can lead to injury before employees even start working on site.

In the unfortunate event an incident occurs, the system transforms the investigation process by using the recorded video footage to show exactly what happened, significantly reducing downtime during investigations and costs associated with extended shutdowns.

The system features an intelligent safety helmet monitoring capability that detects when employees are not wearing safety helmets, sending an alert via sms or email. Additional security features include geo-fencing, face recognition and crowd-counting to monitor and protect work sites.

REMOTE SITE OR IN–PIT MOBILE WI–FI

Solar powered, mobile communications hubs are a cost-effective solution to extending communications coverage in remote locations. They create a Wi-Fi hotspot and also incorporate security cameras making them ideal for temporary communications needs, either in the pit or at short-term accommodation camps. The unit has a range up to 100km and incorporates battery storage banks for 24/7 coverage.

IMPROVING TARGET ZONE INTERSECTION

We also use borehole management software that shows a unique 3D view of the trajectory of a drill hole with full 360° rotational views, providing complete visibility of the progress of your drilling program. It is also capable of two-dimensional (2D) section and plan views, across individual or multiple boreholes.

This enables more efficient drilling programs at a lower cost and most importantly, helps to ensure targets zones are reached on every hole.

Both drillers and geologists benefit by using the software. Drillers can monitor drilling progress and correct deviations quickly, while geologists can be confident their target zone will be intersected effectively, helping ensure accurate resource definition.

A number of reports are available to monitor daily progress, plan interventions if needed or guide decision making and can be emailed directly to Drill Supervisors and Geologists.

We also use the latest in sophisticated gyro technology to provide accurate and reliable survey data in both magnetic and non-magnetic environments.

SOLIDS REMOVAL UNITS

To reduce environmental impact, we use Solids Removal technology, which avoids digging fluid sumps, significantly lowers drilling fluid use and associated costs, while improving health and safety conditions on site.
SUPPORT SERVICES

A consistently efficient and productive drilling service can only be achieved with quality support, experience and systems.

SAFETY

We have an uncompromising commitment to the occupational health and safety of our employees and others where we work. As such, we have one of the best safety records in the industry.

We expect visible safety leadership across all levels of our company, from our Executive Leadership Team to our drill crews on site and will exceed the most stringent safety requirements. Our numerous safety initiatives, training programs, policies and procedures are designed to ensure all our employees have the knowledge to conduct their work safely. Most importantly we work with our employees to ensure they understand the controls to mitigate any risk and are empowered to act if they are unsafe in their workplace or they identify an unsafe condition or behaviour.

It is our goal at every site we operate to exceed safety requirements and be a positive contributor to the safety culture at the mine. Our maintenance programs ensure all rigs are kept to the highest safety standards.

SUPPORTING LOCAL COMMUNITIES

We recognise the importance of contributing to the local communities in which we operate. We actively employ, train and promote local national labour and work to reduce expat ratios across our business. We invest substantially in training and professional development of our employees and provide the opportunity for national employees to receive internationally accredited qualifications.

In addition, we work closely with our clients to support their local community programs and other corporate social responsibility strategies.

MAINTENANCE

We establish world-class maintenance facilities to achieve high fleet utilisation and invest in the latest equipment for our workshops to keep our drills turning. Regular rebuilds and planned maintenance optimise asset performance and reduce downtime and costs – our fleet is one of the youngest and most reliable in the industry.

TRAINING

Our employees undergo ongoing training across all areas of our drilling operations to ensure competency and a professional service delivery. Training combines site-based practical training together with theoretical and competency-based assessments.

PROFESSIONAL DELIVERY LEADERSHIP

We pride ourselves on being always looking at how we can do something better – so much so that in some cases our clients have adapted our standards as their own. We collect and analyse data to assess performance and implement continuous improvement initiatives.