AUTONAV

Guiding the way to
infinite mining possibilities.

RCT
Powered by Epiroc

Proven interoperable automation.

Moving your mine into the future

Moving your mine into the future with RCT's AutoNav solution. Take control of your machines to reach greater heights in safety, productivity and profitability.

Our automation and control portfolio are adaptable enough to meet a variety of needs, from the automation of a single unit to a completely autonomous fleet and beyond.

Our automation path allows the combination of all the latest technology available to deliver a fully autonomous solution for your mine

RCT's technology capabilities

Digitization

Digitizing the mining environment to support machine control & data capture.

Adaptability

Ability to customize our solution to suit clients specific mining operations.

Interoperability

Technology that can be applied across any make and model of equipment.

Information

Leveraging our interoperable platform to harvest data across the various mobile equipment fleet.

Scalability

Offer flexible and adaptive pathways to higher levels of automation and control.

Get all the benefits from automation

RCT is revolutionizing the mining industry as a trusted technology partner by modernizing operations with its industry-leading Automation and Control solutions. When operations are automated, machine performance improves dramatically because discrepancies are eliminated. RCT Automation implementation boosts productivity and safety within the operation, resulting in increased corporate profitability.

⊕ Increase your yearly profit by

Increased run time on machines

More buckets per day

Reduce machine damage

Eliminate unplanned downtime

Less wear and tear

Increase fuel efficiency

⊕ Expand productivity and minimize downtime

Operate multiple machines

Faster tramming

Hot-seat transition

Remove disparity between operators

Improved overall efficiency

Faster cycle times
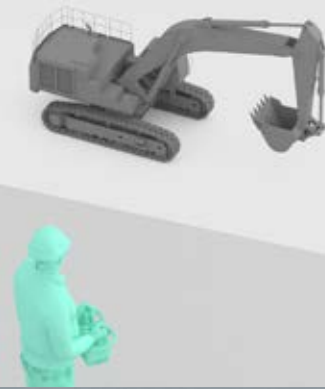
⊕ Improve operational safety and equipment damage

Better operator health

Easy-to-use system

Avoid unforeseen accidents

Improved working conditions

Reduced fatigue

Anti-collision intelligence

From the simplest to the most sophisticated, we offer multiple levels of automation, depending on readiness of the operation.
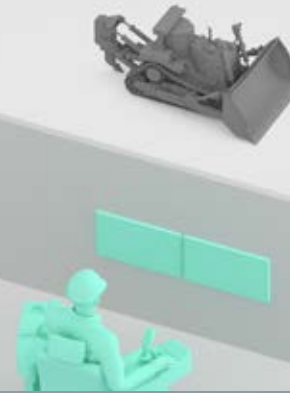
LEVEL 1
AUTONAV LOS

Line-of-sight control

Keep operators at a safe distance, reduces fatigue, and minimises repetitive stress injuries – boosting productivity and operator well-being.

The perfect first step toward automation, giving operators control of the machine from up to 200 metres away using a handheld device.

Option to expand system capability with video assist, providing comprehensive remote monitoring and control for improved efficiency.

LEVEL 2
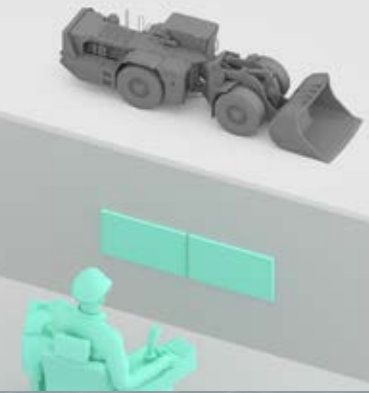### AUTONAV TELE

Tele-remote

Relocate operators to a secure control room, enabling them to comfortably control the machines in real time with strategically placed cameras and sensors.

⊕ **AutoNav centre**

⊕ **G-Dash**
Real-time data through a graphical interface, conveniently displayed on a dedicated screen for effortless operator clarity and efficiency.

⊕ **Machine containment system**
Ensures that remote-operated machines stay within designated areas and keeps personnel out of restricted zones.

⊕ **InSite**
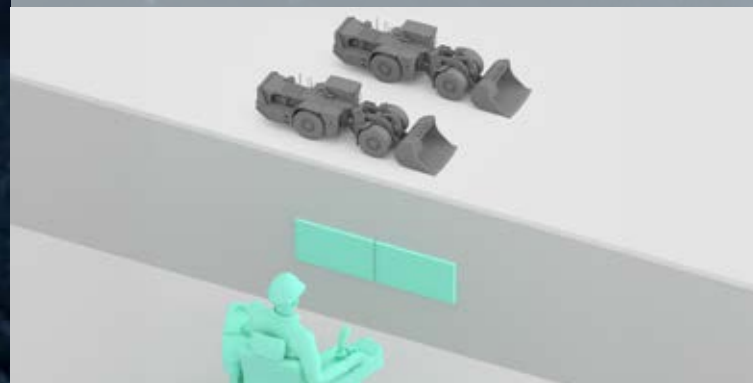The touch display gives operators real-time machine data and information.

LEVEL 3
AUTONAV LITE

Semi-automation

Everything included in AutoNav Tele, and:

⊕ **Autonomous tramming**
Enables machines to travel independently between locations with minimal operator input, reducing operator workload.
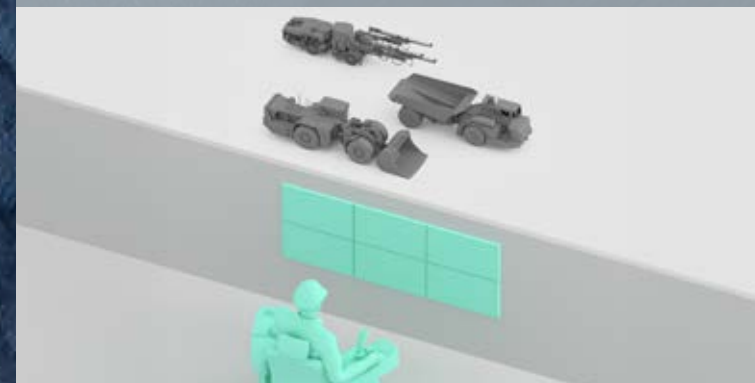
Our agnostic automation range is scalable and can be applied to a single machine or an entire mixed fleet.

LEVEL 4

AUTONAV

Multi-machine automation

Everything included in AutoNav Lite, and:

⊕ **Multi-machine select**
Allows an operator to switch from controlling one machine to another from the one operator station.

⊕ **Multi-machine control**
Allows one operator to control multiple machines on site, delivering better visibility of the work area.

⊕ **Autonomous tramming plus**
The operator simply releases the joystick, and the machine automatically navigates to the destination, controlling steering, braking, and speed independently.

⊕ **AutoDump**
Trains the machine to dump into a stockpile, fixed point, ore pass, or even a truck

⊕ **G-Data**
Machine diagnostics and production-related data are gathered and displayed items to make informed decisions.

LEVEL 5

AUTONAV PLUS

Fleet automation

The most comprehensive automation system for mining fleets, designed to optimise operations in shared automated production areas, enabling operators to remotely oversee the entire process.

Everything included in AutoNav, and:

⊕ **Multi fleet select**
One operator can simultaneously control an entire fleet of different machines on-site.

⊕ **Integration**
Bring together all existing and new systems for a streamlined solution.

⊕ **AutoDig**
Will ensure the operator is in the optimal position for the ideal dig, ensuring their bucket is filled on the first time, every time.

⊕ **Traffic management**
Ensures collisions don't occur by issuing commands based on machines that could intersect whilst tramming. These commands then determine the action the machine will take. Once this task is given, the system decides which machine has right of way when other machines are approaching a particular segment.

⊕ **Mega wall streaming**
Bring your entire operation to life, where staff can observe and monitor data.

Comprehensive Services

All solutions are backed by RCT's leading support model and ever-expanding service network; aimed at providing local support, using local people.

Site Audit & Consultation

RCT can perform site audits to ensure the safest and most productive approach is taken. RCT provides consultancy services, including feasibility studies and strategies to improve technology and optimise operations.

Customised Solutions

RCT Custom is a department specialising in the delivery of bespoke solutions to address vital operational improvements. The team has the expertise and resources to resolve challenges, regardless of the size or scope of the project.

Skills Training

Industry-recognised courses are tailored to suit operators and maintenance personnel, allowing sites to be more self-sufficient. Supported by practical demonstrations and hands-on experience, relevant content is delivered based on the vast knowledge of our trainers and technicians.

Parts

Keep your operation running without disruptions. RCT, has you covered with its stock of 2,500+ specialised parts that can be shipped anywhere in the world.

Client Testimonials

"With no prior remote experience, my operators embraced the opportunity; quickly adapting to the new technology & the transition was surprisingly quicker than anticipated. This technology allows us to operate safely in a controlled environment outside of harm's way. Also, the multi-machine select feature has proven to be invaluable. During operations, our production is not sacrificed if a machine needs to go offline because we have a standby machine available at the push of a button"
– Western Contracting Services

"All in all, the systems are trouble-free & easy-to-use. It's provided US with the tools necessary to carry out high-risk work, while keeping our people safe, allowing them to operate mobile machinery from either the automation centre or a Toyota Land cruiser troop carrier."
– Grange Resources

"We're working to improve operational continuity – implementing automation for mining equipment for safety & to improve the productivity. For this reason, Codelco worked with RCT."
– Codelco

"RCT are a very professional company with a reliable product – I'm very pleased. The CAT D8R is an older machine & it was a much more intense installation, but RCT did a really good job in setting it up within a couple of weeks."
– Alliance Resource Partners L.P.

"The project provided an opportunity to evaluate technologies and capabilities of AUTONOMOUS systems. It improved safety of mining processes in challenging mining & geological conditions of the Olimpiada Mine."
– Polyus

"This change is obviously safer for the operator but also provides the operation with increased utilisation as we can now continue working over shift change resulting in an operational efficiency improvement of 16 per cent."
– Barrick

"The perceived benefits in productivity were estimated between 25-30 per cent, meaning the system would pay for itself in less than six months."
– EldoradoGold

rct-global.com

solutions@rct-global.com

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