



Hexagon TeleOp

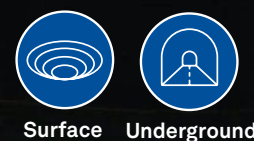
Integrated remote operation solution for heavy machinery

Hexagon TeleOp is an advanced teleoperation system that enhances operator safety, productivity, and operational flexibility by enabling full remote control of heavy mining equipment from secure, centralised control stations; whether on the surface or underground. With over 3,000 global installations across more than 200 machine models, Hexagon TeleOp transforms how heavy machinery is controlled; making operations safer, more productive, and future-ready.

Powered by Hexagon's proprietary Drive-by-Wire (DBW) technology, the solution is OEM-agnostic, supporting remote control over any vehicle type, make, model, or year. It is designed to accommodate the full range of mining equipment—including drills, haul trucks, dozers, and shovels—across both open-pit and underground environments.

Hexagon's Drive-by-Wire system enhances traditional mechanical and hydraulic controls with robust electronic interfaces, enabling the remote conversion of virtually any vehicle platform, including legacy mechanical systems and modern electric-powered equipment. By integrating Drive-by-Wire capabilities with Hexagon's industry-leading TeleOp platform, this system delivers real-time, precise remote machine operation. Operators experience a familiar control environment that replicates the cabin's tactile feel and functionality, significantly reducing training time and easing the transition to remote operations.

Hexagon TeleOp serves as the foundation for safe, continuous mining operations; even during shift changes or in hazardous conditions. It drives improvements in productivity, equipment utilisation, and overall operational profitability.



Advanced capabilities

- **TeleOp Multi**

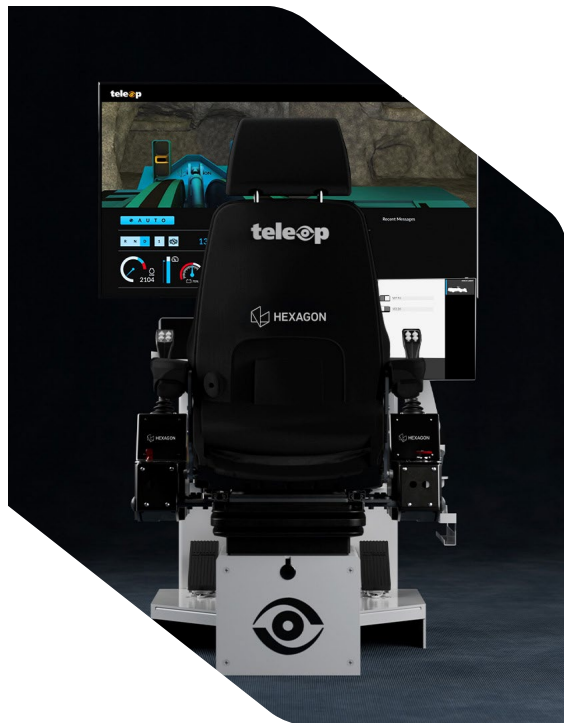
Designed for maximum efficiency in any mining environment, TeleOp Multi allows a single operator to control multiple machines from one TeleOp station. With seamless switching between equipment types at the push of a button, it supports all vehicle classes and control room configurations, optimising resource utilisation and reducing idle time.

- **TeleOp Assist**

Available exclusively for underground LHDs, this feature provides intelligent steering support, helping keep machines aligned during straight paths and controlled through turns—minimising contact with tunnel walls and extending equipment life.

- **Bucket Assist**

A visual guidance system that displays real-time boom and bucket positioning to optimize digging performance. Sensor inputs provide feedback to help the operator maintain ideal digging depth, reducing ore dilution and enhancing overall productivity.



Benefits

- **Enhanced safety:**

Removes operators from high-risk areas such as underground shafts, stope zones, and blast sites—reducing exposure to hazardous conditions.

- **Increased productivity:**

Enables continuous equipment operation during shift changes, breaks, or restricted access periods, helping maintain steady production and maximise asset utilisation.

- **Operator-centric design:**

Offers improved visibility, reduced fatigue, and significantly better working conditions by relocating operators to safe, climate-controlled control centres.

Features

- **Comprehensive equipment coverage:**

Compatible with a wide range of mining equipment, including LHDs, drills, excavators, shovels, bulldozers, rockbreakers, haul trucks, and more.

- **OEM-agnostic integration:**

Fully compatible with all makes and models of machinery, as well as existing camera systems and network infrastructures.

- **Full functional control:**

Enables complete remote operation of all equipment functions without compromise.

- **Intuitive operator experience:**

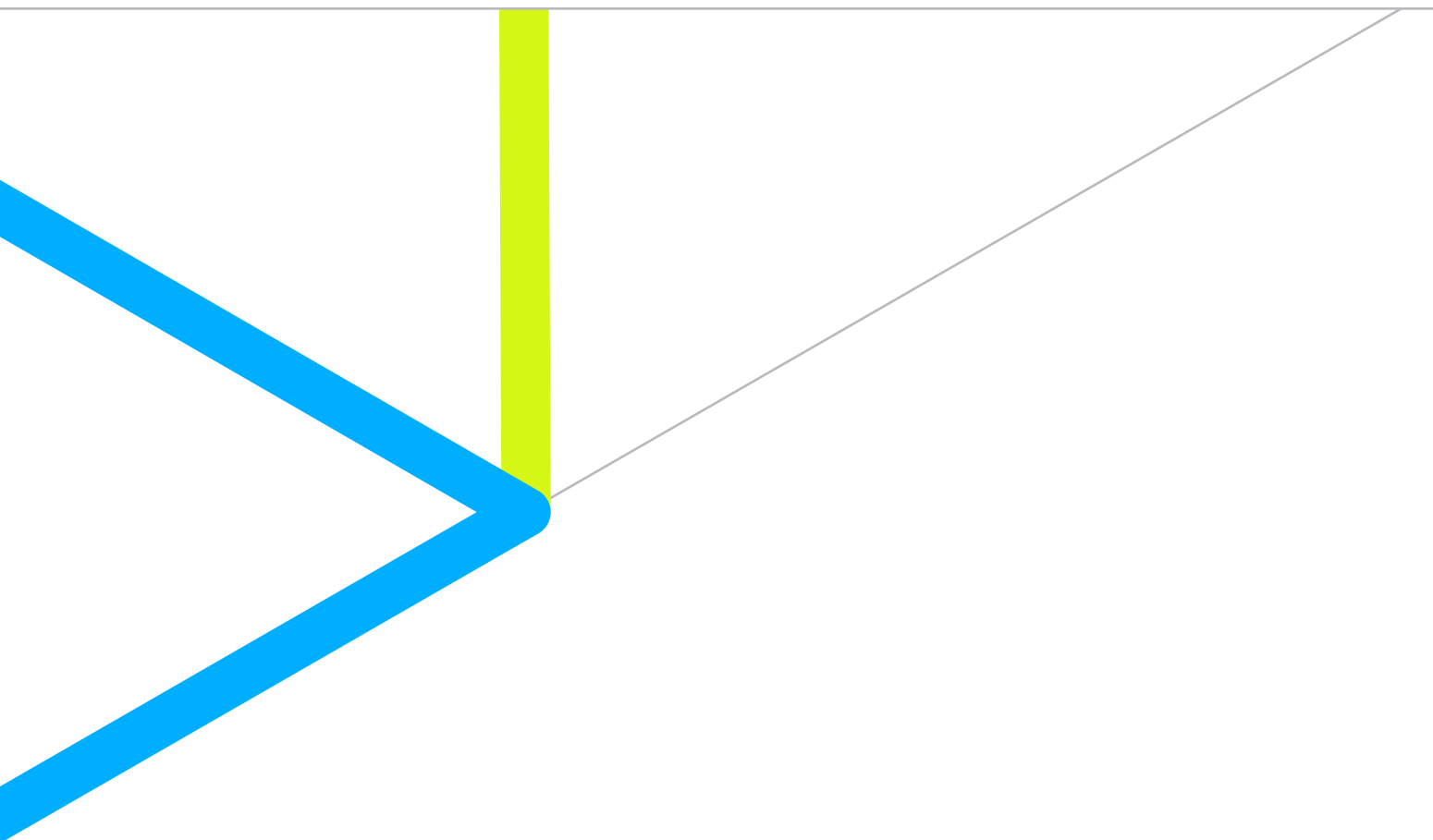
Replicates the tactile feel and control layout of in-cabin operation for a familiar, seamless transition.

- **360-degree coverage via multi-camera system:**

Operators monitor live feeds from strategically placed external cameras, enabling full-surround visibility and enhanced operational safety.

- **Minimal training requirements:**

Mimics actual machine behaviour, significantly reducing training time and easing operator adoption.



About Us

Hexagon is the global leader in measurement technologies. We provide the confidence that vital industries rely on to build, navigate, and innovate. From microns to Mars, our solutions ensure productivity, quality, and sustainability in everything from manufacturing and construction to mining and autonomous systems. Hexagon's Mining division connects measurement and autonomy across surface and underground operations, pushing the boundaries of autonomous technology and data insights to help customers optimise resources and move material safely.

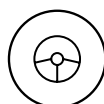
This offering includes solutions to support:



**Evaluation,
Planning
& Design**



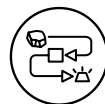
Drill & Blast



Load & Haul



**Survey &
Monitoring**



Processing



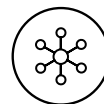
Reclamation



Safety



**Autonomous
Operations**



Insights

Connect with us

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