

Technology Products

Technology products enable your Cat machines and entire equipment fleet to be more productive, help you manage your assets and monitor equipment health. The products listed below are all available from your Cat dealer as factory fit, attachment ready option, or an aftermarket solution. Contact your Cat dealer for specifics on machine model configurations.

Technology Product Family	Description
AccuGrade™ Grade Control System	The AccuGrade Grade Control System helps customers increase productivity by up to 40 percent while reducing site costs dramatically. The system features a suite of products which includes cross slope, sonic, laser, GPS and UTS technology. Our customer's bottom line depends on moving material accurately, quickly and safely the first time. Maintaining consistent grade is difficult, labor intensive and challenging for even the most experienced operators. By combining digital design data, in-cab operator guidance features and automatic blade controls, AccuGrade enhances grading accuracy and reduces staking costs by up to 90 percent.
Cat Grade Control	Cat Grade Control combines traditional machine control and guidance with machine hardware and software in the factory to improve productivity, usability, reliability, job site safety and machine value. By integrating the system into Cat machine hydraulics, sensors and cylinders, customers are able to save valuable time and money over installing an aftermarket grade control system.
Command for Dozing	Command for dozing enables remote operation from a safe location away from the machine. Removing operators from the cab of a machine working in hazardous conditions promotes safety and reduces operator exposure to dust, noise and vibration. The Operator Console is a portable, over the shoulder unit that enables line of site remote operation of the machine. Operating range varies from 400-800 meters depending on the radio frequency selected. Terrain's avoidance zone functionality (optional) can be utilized to further enhance safety.
Command for Underground	Command for underground is designed to enhance safety and boost operator efficiency and effectiveness. The system allows the operator to work from a safe and ergonomic work station far from the Load Haul Dump (LHD) machine – either on the surface or underground without sacrificing machine productivity. The system can also have a significant impact through increased machine availability, decreased operating costs and extended machine life.
Computer Aided Earthmoving System (CAES) for Landfill	Using satellite navigation technology, machine-mounted components, a radio network and office management software, this state-of-the-art machine guidance system delivers real-time productivity information to machine operators in landfill applications. CAES ensures proper waste placement and optimum compaction. It provides feedback that tells the operator when effective compaction has been achieved and how to better utilize cover soil and minimize airspace consumption.
Detect Object Detection	Large mining, quarry and heavy construction machines have big blind spots. Object Detection solves that problem – and helps keep your people and equipment safe. It enhances operator's awareness during the critical period when they are starting their machine and during the first seconds of movement. The system consists of an interactive touch screen display, radars and cameras on the front, rear and sides of the machine.
Fleet	Fleet is a comprehensive mine management system featuring an advanced truck assignment engine, health and operational event alarming, "what-if" analysis, productivity tracking, machine tracking, material management and a comprehensive reporting package. Integrating with other Cat MineStar™ System capability sets, Fleet improves productivity by 10-15%, eliminates misdirected loads, improves information availability and provides greater flexibility to adjust for changing mine and market conditions.
Health	Health enables real time and batch monitoring of fleet-wide, critical health and operating parameters. By recording information from on-board monitoring systems like VIMS™ and making it available in a comprehensive reporting package, Health helps customers and Cat dealers identify maintenance and operational issues to improve machine and fleet availability.
Product Link	Product Link enables remote monitoring of your equipment to help keep your jobs on schedule, maintain machine health and reduce the costs of owning and operating your fleet. The system provides information via satellite or cellular connection to simplify fleet management, track equipment, maximize uptime, monitor machine usage and link your entire fleet. Product Link comes standard on most Cat machines and is available for retrofit on Cat and other brands of equipment.

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Terrain	<p>Terrain enables high-precision management of drilling, dragline, grading and loading operations through the use of guidance technology. It increases machine productivity and provides you real-time feedback for improved efficiency.</p> <p>Terrain for drilling increases hole placement and depth accuracy while removing the cost of drill pattern survey and staking. Position and status information of other drills working on the same pattern is provided to operators in real time on the in-cab display.</p> <p>Terrain for draglines enables production monitoring of all dragline activities, right down to individual bucket loads and dump locations. Machine performance, productivity and payload are monitored and organized in reports to optimize dragline output and minimize operating costs.</p> <p>Terrain for grading and loading help maximize machine efficiency by monitoring ore bodies, bench height, cycle times and volume of material cut and filled.</p>
VIMS™	<p>The VIMS System enables your equipment to provide detailed, up-to-the-minute data about its own health and working conditions by monitoring key temperatures, pressures and more. It alerts operators of abnormal machine conditions and provides instructions if action is needed. The system gathers historical trends, histograms, events and more for off-board analysis in applications like VIMS PC and Health. Additional applications like payload and tire monitoring (where applicable) can extend the capability of the VIMS system even further. VIMS Guardian, available as a retrofit for certain legacy machines, gathers the same types of information as standard VIMS, but without the operator interface.</p>
Please see your Cat dealer for specific model, region availability and application information.	