

CAT® MINESTAR™ SYSTEM

COMMAND



AUTONOMOUS SYSTEMS FOR DRILLING, HAULING, DOZING AND UNDERGROUND





FLEET



TERRAIN



DETECT



HEALTH



COMMAND





INTEGRATING AUTONOMY INTO SITE OPERATIONS

Command gathers and processes data from all Cat MineStar System capability sets. By enabling total integration of machine data, tracking and management information, Command provides a “big picture” look at your entire operation.

This broad view—with the ability to zoom in on single machines or specific groups of assets—is essential for making autonomous operations safe, efficient and productive within the context of other mine activities.

Depending on the needs of your operation, Command can be configured to provide automation on a single machine or on multiple types of equipment across your entire fleet. Command for dozing, drilling or underground can be implemented individually or on a small group of machines. Command for hauling and longwall can take you to full-scale autonomy whenever your operation is ready.

For big or small mines, on the surface or below ground, Command delivers the next generation of mining...now.



COMMAND FOR DOZING

A remote control system, Command for dozing is available for Cat D10T and D11T Track-Type Tractors. Mining applications include stockpile feeding, leach pad construction, high wall and edge operation. An over-the-shoulder line-of-sight operator console enables control of the machine from a safe distance away from the working area.

COMMAND FOR DRILLING

Command for drilling is being developed to enable fully autonomous drilling. It will enhance safety by keeping operators out of the pit and away from areas where explosives are being used, while increasing drill pattern accuracy and improving the overall efficiency of drilling operations. Built on the proven Terrain for drilling platform, Command for drilling will enable automated tramming and drilling to target locations and depths. It will also provide feedback on material being drilled, which can aid in ore sampling and precise hole loading.

COMMAND FOR LONGWALL

Command for longwall improves safety by removing personnel from the working face. It delivers semi-autonomous control for plows via a remote operator station. Longwall subsystems are linked through a high-speed computer network designed to provide powerful logging, analysis and visualization capabilities that give the operator a clear picture of current and past activity at the face. Semi-autonomous control for shearers is also being developed for safer, more efficient underground coal operations.