



FIVE WAYS GRADING TECHNOLOGY SAVES MONEY ACROSS YOUR OPERATIONS

Grading is a vital but less-visible mine site function that provides essential support for loading and hauling operations. Here are five ways that today's grading technologies—such as Cat® MineStar™ Terrain for grading—help to make dozer and motor grader operations more efficient and safer, which can make a huge difference to bottom line of your mine site.

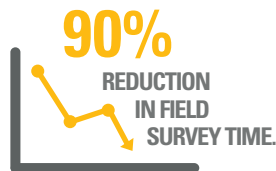


OPERATOR FEEDBACK HELPS GET JOBS DONE MORE EFFICIENTLY

In-cab grade plans and real-time productivity and volume feedback allows operators to see what's been done, what's left to do and when they're working as efficiently as possible. This also saves valuable time by eliminating rework.

SMOOTH ROADS & BENCHES SAVE EQUIPMENT WEAR & TEAR

Color-coded cut and fill maps provide real-time feedback on progress towards the final grade, resulting in more accurate construction of bench slopes, roads and ramps. Maintaining accurate grades and eliminating high and low spots reduces wear and tear on truck frames, suspension and tires, saving money in maintenance costs and extending the life of your valuable equipment.

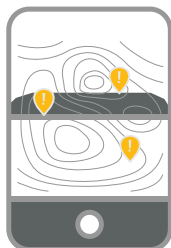


DIGITAL GRADE PLANS SAVE ON SURVEYING COSTS

Putting the design plan in the cab eliminates the need for costly surveying and staking while helping operators hit the planned grade more quickly and accurately. It also means fewer people need to take the risks involved with working on foot near heavy equipment. Sharing between machines also helps to streamline operations and reduce grading overwork.

AVOIDANCE ZONES KEEP OPERATORS AND EQUIPMENT SAFE

An in-cab display shows avoidance zones, helping operators stay clear of restricted areas such as unstable slopes, overhead infrastructure and other dangerous places. Operators can also see the position of other machines working in the area, keeping them more aware of their surroundings and helping to reduce work interference and collision risks.



**REAL-TIME DESIGN PLAN UPDATES
NO "MISSED MEMOS"
OR WASTED EFFORT.**

ON-SITE SUPERVISORS CAN EASILY MONITOR PROGRESS AND MAKE UPDATES

Terrain includes a mobile app that lets on-site supervisors view progress updates from nearby equipment. They can see the location of all Terrain-equipped machines, assign tasks and validate design plans without having to drive back to the mine office. Plus, updates made on the mobile app are communicated to machine operators in real time, helping to keep everyone informed and on schedule, even when changes are required.

All results based on case studies of surface pit operations. Your results will vary.

GET MORE DETAILS

[Click here](#) to learn more about how Cat Terrain for grading can help make grading operations more efficient, safer and even more valuable to your bottom line.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com/MineStar

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