

▶ **OUT IN
FRONT**

TECHNOLOGY HELPS
CONTRACTOR GET AHEAD
OF THE COMPETITION p.02

CAT[®] TECHNOLOGY NOW

SPECIAL EDITION: TECHNOLOGY FOR DOZING

ALSO IN THIS ISSUE

- ✚ DOZING TECHNOLOGY
AROUND THE JOBSITE p.04
- ✚ THE LATEST CAT MEDIUM
DOZER LINEUP p.06



SPECIAL EDITION: TECHNOLOGY FOR DOZING



OUT IN FRONT

TECHNOLOGY HELPS CONTRACTOR GET AHEAD OF THE COMPETITION

Over the past three decades, Plateau Excavation has played an important role in the considerable commercial, residential and industrial growth across Georgia and the entire southeast.

Based in Austell, Ga., Plateau Excavation has become one of the region's largest and most technologically advanced site infrastructure contractors. Much of Plateau's growth has resulted from its reputation for tackling large, complex site development projects that require careful pre-construction planning, prudent management, comprehensive experience and the efficient use of a lot of large, high-performance equipment.

Currently, Plateau has more than 80 pieces of equipment in its fleet of more than 600 machines that utilize grade control technology from Caterpillar.



"WE'VE BEEN A FRONTRUNNER IN THE CONSTRUCTION INDUSTRY AS FAR AS ADOPTING NEW TECHNOLOGY."

RYAN DUKE

VICE PRESIDENT OF CONSTRUCTION FOR PLATEAU

"The constant application of new technologies in the field has enabled us to be more productive and get out in front of our competitors.

"It started with our first machine in the early 2000s, and it has only increased with each passing year," Duke says. "Essentially every dozer we buy now—or an excavator or a motor grader—has grade control on it."

Cat® Grade with 3D works seamlessly with other technology features on Cat dozers. The system uses a GPS signal to automatically adjust blade movements—both lift and tilt—to follow the design plan. The accuracy and precision save time, labor and materials on all phases of the job.

Cat Grade technology significantly increases Plateau's production and profitability, Duke says. Grade control can accomplish more efficiently and precisely what used to be done with manual labor—setting up stakes in the ground. Now it's all done by an equipment operator following programmed settings in the machine.

"You can take an average operator and turn them into a finish-grade operator with the automatic grade controls and the touchscreen technology," Duke says. "Before grade control technology became available, that was not the case—you had to be a finish operator to run a finish dozer."

When it comes to winning bids, the ability to perform jobs faster gives Plateau the edge. Project completion time with the new technology is up to 10% faster, Duke says.

"Time is as important as price," Duke says. "With the technology we have, we can definitely reduce time to completion, which plays a huge role in our ability to win bids and perform projects. The quicker you do a project and finish it, the less money is spent performing the work, which all goes to the bottom line.

"Another benefit that comes with Cat Grade technology is you have the ability to quantify what you're doing on a daily basis and make adjustments if needed," Duke adds. "Now a machine has the ability to finish it as it goes, and the added productivity is tremendous."

As crews worked in mid-October to prepare an 80-acre tract for a warehouse in Gwinnett County northeast of Atlanta, Plateau's new Next Generation Cat D3 and D6 Dozers took less time to do more work, which resulted in greater productivity and less fuel consumption.

"For us, it means less man hours on the job and doing it one time versus having to go back and check it over and over," says Plateau superintendent Richard McGuirt. "With the Cat Grade systems on these dozers, they're not over digging—they're digging right on grade. We blade it one time and we're done. We're getting a lot more production out of these new Cat dozers—up to 35% more."

As the company grows at an annual rate of 10-15%, Plateau purchases new machines each year as it replaces older equipment in its fleet. Cat dealer Yancey Bros. Co. keeps the firm apprised of any new technology that becomes available.

"We have periodic meetings with Yancey," Duke says. "During these meetings, they will advise us of any new technology from Caterpillar. Once it arrives, they reach out to us so we can demo it."

For a large, growing firm like Plateau—it currently has more than 700 employees—having the latest technology is an advantage when it comes to recruiting.

"If you're trying to recruit an operator and you offer him a machine with the latest next generation technology, compared to an old, worn-out machine with no technology, you absolutely have an advantage in hiring operators," Duke says.

Technical proficiency is also a selling point with clients. In addition to machine control, Plateau provides in-house surveying and drone mapping.

"Technology is a lot more important than it was 10 years ago—we think it's essential," Duke says. "So, I think that's an advantage for us and something that our clients value. We show them how we can do jobs more efficiently and at less cost.

"And the increased production from our next gen Cat dozers definitely factors into that equation."





INTEGRATED TECHNOLOGY BOOSTS PRODUCTIVITY

For generations, Cat dozers have led the way in making work easier and more efficient. Today, a broad choice of factory-integrated technology features help make operators more productive without extra effort. The latest next generation Cat dozers offer even more technology options to help operators take their productivity to the next level.

Richard McGuirt, a superintendent with Plateau Excavation in Austell, Ga., says his crews are realizing higher productivity through efficiencies that are gained from the Cat Grade with 3D system. Cat Grade technology boosts the accuracy of operators at all skill levels, so work gets done faster with less rework at lower costs.



“THESE NEW NEXT GEN CAT DOZERS ARE A WHOLE LOT MORE OPERATOR FRIENDLY,” MCGUIRT SAYS. “WE CAN TAKE A LESS EXPERIENCED OPERATOR AND MAKE HIM INTO A GREAT OPERATOR A LOT EASIER NOW.”



Cat Grade with 3D automatically adjusts blade movement, enabling an operator to follow the design plan displayed on a 10-inch touchscreen that operates like a smart phone.

“The 3D graphics and other control features on the touchscreen are a whole lot more accurate than the older versions,” McGuirt says. “You can rotate the image 360 degrees or 180 degrees and look at the whole site and pinpoint wherever you are with the dozer. It tracks where you’ve been and what you’ve done.”

McGuirt likes the operator assist features that come with the new Cat dozers, which include Blade Load Monitor, Stable Blade, AutoCarry™ and Traction Control.

“The AutoCarry technology is so much more intelligent than the last version,” he says. “You can actually load the blade up and the tractor will sense the overload. And it’ll back it off and you can keep dozing. So you’re limiting your track slip, which can cause you to lose production and burn more fuel.”

McGuirt also likes the following new features:

- With the Attachment Ready Option (ARO), a new Cat dozer comes from the factory ready for simple installation of an aftermarket grade control system. “Normally, when we get the dozers shipped to us, they’re 100% ready to go,” McGuirt says. “All we do is set the site control and site files in the system and they’re up and running. All the calibrations are already done at the factory or dealer.”
- Next generation Cat dozers are designed to provide excellent visibility to the work area in front of the blade. “You can tell the difference,” McGuirt says. “Now you have a wider view of the blade and a broader view of all your surroundings.”
- Operator-friendly cabs in the new Cat dozers provide more work and storage space, McGuirt says. “These new dozers have a lot of leg room, and they have more comfortable seats, so you can spend more time in the tractor and get more work done. When the operators are comfortable, we get a whole lot more productivity out of them.”

CAT® DOZING TECHNOLOGY

MAKING EVERY JOBSITE TASK EASIER, SAFER & MORE EFFICIENT

Look anywhere on a typical jobsite and you'll see opportunities to apply Cat technology for dozers. From operator assist functions to production monitoring to remote control systems, there are Cat technologies for dozers for every job on your site.



- GRADE WITH 3D
- AUTOMATIC RIPPER CONTROL



GRADE WITH SLOPE ASSIST



CHOOSE THE RIGHT TECHNOLOGIES

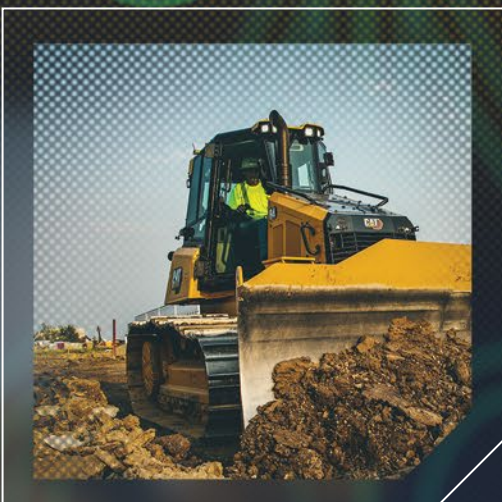
Finding seasoned equipment operators has become an ongoing challenge. Technology has become the go-to solution to make machines easier to run for operators across all skill and experience levels. This guide will help you choose the right level of technology for your operators, application need and business success.

TECHNOLOGY

WHAT IT DOES

| | |
|--|---|
| Cat® Slope Indicate | Shows the machine cross-slope and fore/aft orientation on the primary monitor. |
| Cat Grade with Slope Assist | Maintains blade angles to build pads, spread truck dumps, build embankments and more. |
| Cat Grade with 3D | Adds real-time satellite positioning guidance to automatically adjust blade movements, both lift and tilt. |
| Auto Carry | Automates blade lift functionality. |
| Cat Grade with 3D Auto Blade Assist | Automates blade pitch and lift during Load/Carry/Spread cycle based on operator. |
| Cat Grade with 3D Automatic Ripper Control | Automates ripper height. |
| Cat Command | Provides remote control solution both in field and off site. |
| Stable Blade | Makes it easy to get smooth surfaces using manual inputs. |
| Blade Load Monitor | Gives the operator real-time feedback on current load versus the optimal blade load based on ground conditions. |
| Traction Control | When track slip is detected, traction control temporarily reduces track power so the operator can adjust blade load and limit the track slip. |

CAT COMMAND FOR DOZING
REMOTE CONTROL



ARO UPGRADE WITH
ASSIST PACKAGE:

- SLOPE ASSIST
- TRACTION CONTROL
- STABLE BLADE
- BLADE LOAD MONITOR
- AUTO CARRY

- PRODUCT LINK™
AND VISIONLINK®
- MACHINE SECURITY
- CAT APP



KEY BENEFITS

INVESTMENT

Quick and easy reference for blade position.

Finishes jobs up to 39% faster. Fewer passes. Less rework. Up to 82% fewer operator inputs.

Up to 50% more productive. Saves time, materials and rework. Up to 80% fewer operator inputs.

Maintains desired blade load, improves load consistency and reduces track slip.

Requires less operator input and increases speed and productivity.

Limits track slip and reduces wear during heavy ripping applications.

Enhances safety in hazardous working conditions by removing operator from the machine. Increases productivity.

Reduces imperfections and produces smooth surfaces.

Actively monitors machine load and track slip, coaching operators to reach optimal pushing capacity.

Automatically reduces track slip, saving time, fuel and track wear. Improves productivity and surface finish quality in poor underfoot conditions.

Standard on most dozers.

No base station or laser needed, no additional hardware or software to buy.

Factory integrated on all dozers.

Included with Cat Grade with 3D on all dozers, included in ARO with Assist on D5-D7.

Integrated feature of Cat Grade with 3D on D8-D9 dozers.

Integrated feature of Cat Grade with 3D on D8-D9 dozers.

Options include: Command Console for line-of-sight and Command Station for offsite remote control.

Standard on D1-D4 dozers and included with the ARO with Assist package on D5-D7.

Included in the ARO with Assist package on D5-D7 dozers.

Included in the ARO with Assist package on D5-D7 dozers.

> MEDIUM CAT DOZER LINEUP 2022

No matter how you envision the future, there's a Cat dozer that's right for your business. Medium Cat dozers deliver industry-leading fuel efficiency and easy maintenance features that reduce owning and operating costs.

Next generation models include factory-integrated Cat Grade technology that helps operators work faster and more accurately.


Plus, you'll find the industry's first high drive electric drive model in this size class. The new D6 XE delivers up to 12% lower maintenance costs and up to 35% better fuel efficiency than traditional dozers in its class.

Contact your Cat dealer for complete model information, specs and availability.

+

D4


Engine model: Cat C4.4
Power-net: 130 hp
Operating weight: 29,259 lb
Up to 30% better visibility.



+

D5

Engine model: Cat C7.1
Power-net: 170 hp
Operating weight: 42,263 lb
Up to 50% more productivity with Cat technology.



+

D6


Engine model: Cat C9.3B
Power-net: 215 hp
Operating weight: 50,733 lb
Up to 9% lower maintenance cost.



+

D6 XE

Engine model: Cat C9.3B
Power-net: 215 hp
Operating weight: 51,333 lb
Up to 35% more fuel efficient.



+

D7

Engine model: Cat C9.3B
Power-net: 265 hp
Operating weight: 65,644 lb
Up to 8% more material per hour.



+

D8T

Engine model: Cat C15
Power-net: 354 hp
Operating weight: 87,600 lb
Up to 18% more material per hour.



> CAT GRADE FOR DOZING COMPATIBILITY

With the capability of installing 3D grade systems from Trimble, Topcon and Leica, Cat dozers can easily integrate into jobsites with existing grading technology infrastructures. All Cat Grade systems are compatible with Trimble, Topcon and Leica radios and base stations*

*Associated subscriptions required.





UP TO

35%

MORE FUEL EFFICIENT



◀ THE D6 XE, WITH ELECTRIC DRIVE

