

CAT[®] GRADE

FOR WHEEL TRACTOR SCRAPERS



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SPEED AND ACCURACY MAKE THE DIFFERENCE

In everything from bulk earthmoving to load-haul-dump and finish grade applications, Cat® Grade technologies deliver the precision and speed you need to get the job done ... and do it right the first time. Combining advanced machine guidance with automated blade height control, Grade for Wheel Tractor Scrapers delivers spot-on accuracy in fewer passes.



GRADE TECHNOLOGY BENEFITS:

- + **Minimize Rework** - Precision machine control and guidance system ensures that material is moved correctly the first time
- + **Increase Productivity** - Get to design plan faster
- + **Cut Costs** - Reduce the cost of rework, labor and material — with no need for grade checking or stakes, you save personnel costs and enhance jobsite safety
- + **Intuitive Operation** - An in-cab touchscreen monitor helps operators precisely follow the design plan
- + **80% Fewer Operator Inputs** - Operators of all experience levels achieve the design in less time, with less fatigue and greater accuracy
- + **Factory Integrated** - Components are built in at the factory for better performance, security and support



FACTORY INTEGRATED FOR PRECISION AND PERFORMANCE

Cat Grade technologies are built-in — not added on. Calibrated at the factory, Grade is deeply integrated into new Cat equipment to provide smooth, precise operation.

Inside the cab, an intuitive dash display that works like a smart phone puts the design plan right in front of operators to keep them on track. It also alerts operators when they come close to an avoidance zone.

Some Grade technologies also are available as aftermarket upgrades to add advanced capabilities. The guidance system works in conjunction with external site system solutions for ease of operation.

The Right Technology for Any Job

Grade for Wheel Tractor Scrapers is designed for seamless system integration with two essential machine automation technologies:

- + **Load Assist**
- + **Sequence Assist**

Both offer capabilities to match your specific needs and operations. An easy-to-view cut-and-fill guidance map enables operators to work more efficiently, covering the entire jobsite and helping to eliminate repeat passes and gaps in the final grade. That means less rework, on-target grading precision and less total time to job completion.

These technologies enable experienced operators to maintain efficiency throughout their shifts, while helping new operators get up to speed more quickly. Cat Grade helps every operator work more confidently and accurately, without guesswork.

LOAD ASSIST - AUTOMATIC BOWL LOADING

Load Assist technology — a standard feature on Grade for Wheel Tractor Scrapers — automates bowl loading with the push of a button. As the machine approaches the cut, the operator activates Load Assist to automate the cutting-edge height.

- + Automated depth control helps operators maintain efficiency
- + GPS speed sensor and feedback technologies control cutting-edge depth during the loading sequence
- + Includes easy-to-implement functions for push-pull, push-loading and self-loading applications
- + Control buttons are integrated into the implement control joystick for easy operation
- + Reduces operator fatigue, tire slip and fuel burn for top productivity and lower costs per ton



SEQUENCE ASSIST - AUTOMATES REPETITIVE TASKS

Doing the same tasks over and over can lead to operator fatigue and inattention. Sequence Assist automates the repetitive tasks an operator performs when loading, hauling and dumping.

Using position-sensing cylinders to move the implements into position for each stage of the work cycle, Sequence Assist frees the operator to focus on guiding the machine while automation takes care of the details.

This system allows the operator to cycle through up to 14 machine commands with the push of a button. Depending on the job, operators can easily switch between manual and automatic modes, as the job requires.

- + Control buttons are integrated into the implement control joystick for easy operation
- + Implement positions can be personalized to operator preference and stored in the operator profile for daily use
- + Helps the operator cycle through functions faster and achieve the design plan in fewer passes
- + Requires up to 80% fewer operator inputs, reducing operator fatigue

PAYLOAD ESTIMATOR

Sequence Assist also includes a Payload Estimator feature that tracks bowl lift cylinder pressure during the loaded haul segment. The system is integrated with VisionLink® for automatic reporting. Payload data is transmitted at the end of the haul when the machine enters the fill area.

Along with providing valuable work-in-progress feedback to your front office, Payload Estimator helps operators reduce overloading that can cause excessive equipment wear and safety concerns.

**Sequence Assist and Payload Estimator are ordered with the machine and supported by your Cat dealer or SITECH® technology partner.*





GRADE SYSTEMS TO MATCH YOUR NEEDS & APPLICATIONS

Grade technologies are factory integrated into new Cat machines. Some Grade functions can be retrofitted to older Cat machines or added as upgrades to existing Grade systems. See your Cat dealer for complete details.

CAT GRADE SCRAPER FEATURES

Real-time depth and slope guidance relative to target grade with in-cab indicators
Available factory-installed
Fully integrated components protected from damage
Overcut presentation with Grade with Assist
Compatibility with integrated Cat on-board technologies: <ul style="list-style-type: none">– Load Assist– Sequence Assist– Payload Estimator
Compatibility with off-board back-office systems: <ul style="list-style-type: none">– VisionLink connected asset monitoring and equipment management software– Cat App equipment health and management software– Cat Productivity production management technologies
Compatibility with radios and base stations from Trimble, Topcon and Leica
Aftermarket kit availability
GPS/GLONASS compatibility

***Contact your Cat dealer to discuss the best feature sets for your fleet, operators and applications.**

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

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